Nova Scotia Department of Transportation

SEAT BELT INFORMATION MANUAL

MAY 1984

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Chairman
NSDOT Highway Safety Committee

SEAT BELT INFORMATION MANUAL

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BILL NO. 63

Government Bill

3rd Session, 53rd General Assembly
Nova Scotia
33 Elizabeth II, 1984

An Act to Provide for Highway Safety and to Amend Chapter 191 of the Revised Statutes, 1967, the Motor Vehicle Act

The Honourable Jack MacIsaac
Minister of Transportation

Halifax
Printed by Queen's Printer for Nova Scotia

Explanatory Note

Clause 1 provides that, where the offence occurs on or after July 1, 1984, a person who is convicted for the first time for impaired driving, refusing an alert test or a breathalyzer test, or the breathalyzer offence may not apply for the reinstatement of a license or the privilege of obtaining a license for one year after the conviction. Where a person's license or privilege of obtaining a license has been revoked for a second or subsequent time for an alcohol related offence, this clause provides that the license or privilege may not be reinstated until the person has been interviewed by someone from the Commission on Drug Dependency.

BILL NO. 63 1984

An Act to Provide for Highway Safety and to Amend Chapter 191 of the Revised Statutes, 1967, the Motor Vehicle Act

Be it enacted by the Governor and Assembly as follows:

1 (1) Clause (a) of subsection (4) of Section 60 of Chapter 191 of the Revised Statutes, 1967, the Motor Vehicle Act, as enacted by Chapter 22 of the Acts of 1978 and amended by Chapter 34 of the Acts of 1981, is further amended by

(a) adding immediately following the word "for" in the fourth line thereof the word "a"; and

(b) adding immediately following the last word thereof the words, punctuation and figures "which occurred before the first day of July, 1984".

(2) Subsection (4) of said Section 60 is further amended by adding immediately following clause (a) thereof the following clause:

(aa) one year in the case of a first revocation or two years in the case of a second revocation or five years in the case of a subsequent revocation where the revocation was for a violation of Section 234, 234.1, 235 or 236 of the Criminal Code which occurred on or after the first day of July, 1984;

(3) Said Section 60 is further amended by adding immediately following subsection (5D) thereof the following subsection:

(5DA) Notwithstanding subsections (5A) to (5D), in the case of a second or subsequent revocation of a driver's license or privilege of obtaining a driver's license for an alcohol related offence the applicant shall attend an interview with a person designated by the Nova Scotia Commission on Drug Dependency.

Clause 2 provides a fee of $100 for the reinstatement of a driver's license or privilege of obtaining a driver's license where the license or privilege was revoked for an alcohol related offence.

Clause 3 repeals seat belt amendments which have not been proclaimed.

Clause 4 enacts new seat belt requirements which apply to persons of all ages in vehicles being operated in the Province.

2 Said Chapter 191 is further amended by adding immediately following Section 60 thereof the following Section:

60A An applicant for the restoration of a driver's license or privilege of obtaining a driver's license following a revocation for an alcohol related offence, as defined in Section 60, shall pay a reinstatement fee of one hundred dollars.

3 Subsections (12), (13) and (14) of Section 157 of said Chapter 191, as enacted by Chapter 42 of the Acts of 1974, are repealed.

4 (1) Said Chapter 191 is further amended by adding immediately following Section 157 thereof the following Section:

157A (1) In this Section,

(a) "child restraint system" means a child's car seat of a type prescribed for a child of a prescribed age, height or weight;

(b) "prescribed" means prescribed by the regulations;

(c) "seat belt" means the complete seat belt assembly or other restraint system for a seating position specified for the vehicle by the Motor Vehicle Safety Act (Canada) at the time the vehicle was manufactured, assembled or imported.

(2) While a motor vehicle is being operated on a highway other than in reverse, the driver of the motor vehicle shall wear a seat belt if a seat belt is available to the driver.

(3) No person shall operate a motor vehicle on a highway unless every passenger in the motor vehicle who is under sixteen years of age is secured

(a) in the prescribed manner in a child restraint system, where the passenger is of an age, height or weight

for which such a system is prescribed; or

(b) where the passenger is not of an age, height or weight for which a child restraint system is prescribed, in a seat belt if a seating position with a seat belt is available to that passenger.

(4) While a motor vehicle is being operated on a highway, every passenger in the motor vehicle who is sixteen years of age or older shall wear a seat belt if a seating position with a seat belt is available to that passenger.

(5) Every registered owner of a motor vehicle shall maintain all seat belts for the vehicle in good condition.

(6) No person shall modify a seat belt in any way which reduces its effectiveness or remove a seat belt except for maintenance or if the seating position has been removed.

(7) This Section does not apply to

(a) a person who is unable to wear a seat belt or child restraint system because of the person's size, build or other physical characteristic, in respect of the use of a seat belt by that person;

(b) a person who in the opinion of a legally qualified medical practitioner is unable to wear a seat belt or child restraint system for medical reasons, in respect of the use of a seat belt by that person;

(c) a peace officer engaged in the lawful performance of his duty;

(d) a fireman while in or on a vehicle of a fire fighting organization;

(e) a driver operating a taxicab for hire;

(f) a medical attendant in an ambulance transporting a patient;

(g) a person while engaged in work which requires the person to leave and enter his seating position in the vehicle at frequent intervals.

(8) The Governor in Council may make regulations

(a) approving a child's car seat and prescribing the manner in which a child is to be secured in it;

(b) governing the type of child's car seat for children based on age, height or weight, or any combination of them;

(c) adopting by reference, in whole or in part, any code, standard or specification respecting child restraint systems;

(d) exempting from any of the provisions of this Section or the regulations made pursuant to this Section

(i) any class of motor vehicle;

(ii) any class of driver or passenger, or

(iii) drivers carrying any prescribed class of passenger,

and prescribing conditions for any such exemption.

(9) Every person who contravenes a provision of this Section is guilty of an offence and is liable on summary conviction to a fine of not less than twenty-five dollars or more than one hundred dollars.

(2) Subsection (1) comes into force on and not before the first day of January, 1985.

BILL NO. 63

An Act to Provide for Highway Safety and to Amend Chapter 191 of the Revised Statutes, 1967, the Motor Vehicle Act

1st Reading: March 30, 1984

2nd Reading:

C.W.H.:

3rd Reading:

The Honourable Jack MacIsaac
Minister of Transportation

1984

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ACCIDENT DATA

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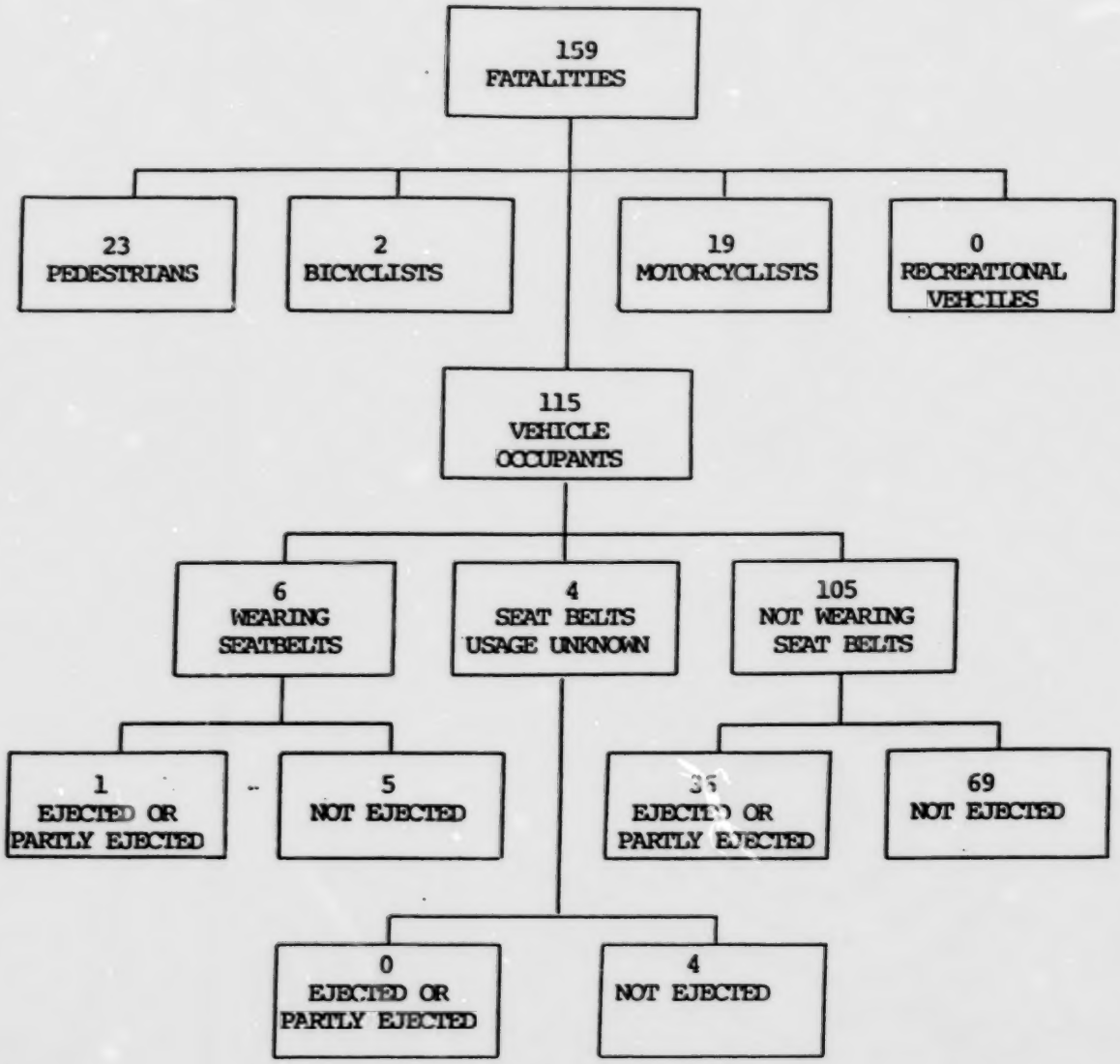
NOVA SCOTIA DEPARTMENT OF TRANSPORTATION

TRAFFIC ENGINEERING DIVISION

SEAT BELT INVOLVEMENT IN COLLISION FATALITIES

JANUARY - DECEMBER 1983



Revised February 1984

NOVA SCOTIA DEPARTMENT OF TRANSPORTATION
TRAFFIC ENGINEERING DIVISION

FATAL MOTOR VEHICLE ACCIDENT 1983

TABLE 1

NUMBER OF ACCIDENTS AND FATALITIES BY CLASS OF VICTIM

MONTH	NUMBER OF ACCIDENTS	DRIVER FATALITIES	PASSENGER FATALITIES	PEDESTRIAN FATALITIES	BICYCLE FATALITIES	MOTORCYCLE FATALITIES
JANUARY	7	4	1	2	0	0
FEBRUARY	10	8	2	1	0	0
MARCH	9	7	3	0	0	0
APRIL	7	3	1	2	1	0
MAY	11	2	3	3	0	4
JUNE	17	8	8	0	0	5
JULY	23	10	9	5	0	3
AUGUST	13	6	4	1	0	3
SEPTEMBER	14	7	2	4	1	2
OCTOBER	16	9	6	3	0	0
NOVEMBER	9	5	0	2	0	2
DECEMBER	6	6	1	0	0	0
JAN - DEC	142	75	40	23	2	19

TABLE 2

NUMBER OF ACCIDENTS AND FATALITIES BY NUMBER OF VEHICLES* INVOLVED

MONTH	PEDESTRIAN		SINGLE VEHICLE		TWO VEHICLES		MULTI VEHICLES	
	ACCIDENTS	FATALITIES	ACCIDENTS	FATALITIES	ACCIDENTS	FATALITIES	ACCIDENTS	FATALITIES
JANUARY	2	2	2	2	1	1	2	2
FEBRUARY	1	1	5	5	4	5	0	0
MARCH	0	0	6	6	2	2	1	2
APRIL	2	2	5	5	0	0	0	0
MAY	3	3	8	9	0	0	0	0
JUNE	0	0	13	14	3	6	1	1
JULY	5	5	14	18	4	4	0	0
AUGUST	1	1	9	9	3	4	0	0
SEPTEMBER	3	4	7	7	4	5	0	0
OCTOBER	3	3	7	7	5	6	1	2
NOVEMBER	2	2	6	6	0	0	1	1
DECEMBER	0	0	4	4	2	3	0	0
JAN - DEC	22	23	86	92	28	36	6	8

* A bicycle being riden by a person is considered a vehicle, and a person pushing a bicycle is considered a pedestrian.

Revised February 1984

NOVA SCOTIA DEPARTMENT OF TRANSPORTATION
TRAFFIC ENGINEERING DIVISION

FATAL MOTOR VEHICLE ACCIDENTS 1983
TABLE 3
NUMBER OF OCCUPANT FATALITIES BY SEAT BELT USE

MONTH	NUMBER OF OCCUPANT FATALITIES	NUMBER OF OCCUPANT FATALITIES - EJECTED	NUMBER OF EJECTED OCCUPANT FATALITIES WHO WERE WEARING SEAT BELTS	NUMBER OF OCCUPANTS KILLED WEARING SEAT BELTS	NUMBER OF OCCUPANT FATALITIES WHICH PROBABLY WOULD HAVE BEEN PREVENTED BY USE OF SEAT BELTS
JANUARY	5	2	0	1	2
FEBRUARY	10	2	0	0	7
MARCH	10	2	0	0	7
APRIL	4	1	0	0	3
MAY	5	1	0	0	4
JUNE	16	7	0	1	10
JULY	19	3	* 1	1	13
AUGUST	10	5	0	1	6
SEPTEMBER	9	3	0	1	3
OCTOBER	15	4	0	0	7
NOVEMBER	5	4	0	1	3
DECEMBER	7	2	0	0	3
JAN - DEC	115	36	1	6	69

* Window on front seat passengers side was open and head went out window and was crushed on overturning.

Revised February 1984

NOVA SCOTIA DEPARTMENT OF TRANSPORTATION
TRAFFIC ENGINEERING DIVISION

OCCUPANTS KILLED WEARING SEAT BELTS (1983)

DATE	VEHICLE	OCCUPANT	LOCATION	REASON	HIT	REASON
20 JAN. 1983	1981 CHEVETTE	DRIVER	HWY. 1, PARADISE	ICY ROADS	FIXED OBJECT TREE	DRIVERS SIDE OF VEHICLE TOOK BRUNT OF COLLISION
29 JAN. 1983	1974 FORD 1/2 TON	DRIVER	HWY. 105, 3.1 km WEST OF EXIT 10 BADDECK	DRIVER FELL ASLEEP	HIT CULVERT	DRIVERS SIDE TOOK BRUNT AND ENGINE PUSHED INTO CAB
30 JULY 1983	1976 TOYOTA	FRONT SEAT PASSENGER	HWY. 10, 4.4 km NORTH OF EAST DALHOUSIE	SPEED AND LIQUOR ON DRIVER	OVERTURNED	PASSENGER WINDOW OPEN, HEAD WENT OUT WINDOW AND WAS CRUSHED ON OVERTURNING
24 AUG. 1983	1980 CITATION	REAR SEAT PASSENGER	HWY. 1, 199m WEST OF MAVILETTE BRIDGE	INATTENTION	ANOTHER VEHICLE	LAP BELT WORN ONLY TOO LOOSE HEAD HIT ROOF AND SHE SUFFERED A BROKEN SKULL
1 SEPT. 1983	1982 SUBARU	DRIVER	HWY. 104, 2.9 km WEST OF DEBERT OVERPASS	HIT HEAD-ON BY GMC VAN ON RIGHT SHOULDER	ANOTHER VEHICLE	SEVERE DAMAGE TO VEHICLE
10 NOV. 1983	1975 VOLVO	DRIVER	GASPEREAU AVE AT INTERSECTION OF WHITE ROCK ROAD, KINGS CO.	BELIEVED TO HAVE HEART ATTACK	WENT THROUGH STOP SIGN AND HIT HOUSE	DID CONSIDERABLE DAMAGE TO BOTH DRIVER AND VEHICLE

NOVA SCOTIA DEPARTMENT OF TRANSPORTATION
TRAFFIC ENGINEERING DIVISION

FATAL MOTOR VEHICLE ACCIDENTS 1983

AGE GROUP OF OCCUPANT FATALITIES

AGE GROUP	NUMBER OF OCCUPANT FATALITIES
0-5	1
6-10	2
11-15	0
16-20	20
21-25	17
26-+	75
TOTAL	115

Revised February 1984

SUMMARY

115 OCCUPANT FATALITIES IN 1983

105 WERE NOT USING RESTRAINTS

69 WOULD HAVE HAD GOOD CHANCE OF SURVIVAL WITH USE OF RESTRAINTS

6 WERE USING RESTRAINTS

4 USE OF RESTRAINTS UNKNOWN

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will not be released by
the N.S. Dept. of Transportation

HIGHWAY FATALITIES 1970-1983
NOVA SCOTIA, NEW BRUNSWICK, ONTARIO AND ALBERTA

YEAR	HIGHWAY FATALITIES BY PROVINCE			
	NOVA SCOTIA	NEW BRUNSWICK	ONTARIO	ALBERTA
1970	219	225	1535	401
1971	224	214	1769	461
1972	254	234	1934	442
1973	277	265	1959	511
1974	268	287	1748	573
1975	242	230	1800	527
1976	203	236	1511	516
1977	183	212	1420	576
1978	228	224	1450	502
1979	189	260	1560	708
1980	199	214	1508	647
1981	165	188	1445	700
1982	170	204	1138	502
1983	159	122	1200*	426*

* ESTIMATED

OCCUPANT FATALITIES 1971-1983

NOVA SCOTIA AND ONTARIO

YEAR	PROVINCE					
	NOVA SCOTIA			ONTARIO		
	Occupant Fatalities	Reduction from 1975	% Reduction from 1975	Occupant Fatalities	Reduction from 1975	% Reduction from 1975
1971	154	-	-	1282	-	-
1972	187	-	-	1391	-	-
1973	206	-	-	1430	-	-
1974	192	-	-	1291	-	-
1975	183	-	-	1314	-	-
1976	146	37	20.2	1114*	200	15.2
1977	123	60	32.8	1002	312	23.7
1978	172	11	6.0	1006	308	23.4
1979	138	45	24.6	1136	178	13.5
1980	147	36	19.7	1095	219	16.7
1981	112	71	38.8	1050	264	20.1
1982	123	60	32.8	783	531	40.4
1983	115	68	37.2	N/A	N/A	N/A

* Ontario Seat Belt Law effective July 1, 1976

INTRODUCTION OF THE NEW BRUNSWICK SEAT BELT LAW

- April 1983 - announced in the House
- September 15, 1983 - Minister announced that law would be effective November 1, 1983
- November 1, 1983 - law effective
- November 15, 1983 - enforcement began
- There was an extensive advertising campaign from April through November to promote seat belt usage

INTRODUCTION OF THE NEWFOUNDLAND SEAT BELT LAW

- June 1981 - legislation introduced and passed
- July 1, 1982 - law became effective
- There was an extensive advertising campaing from June 1981 to July 1982

ACCIDENT STATISTICS
NOVA SCOTIA

FATALITIES (1974-1983)

1720 FATAL ACCIDENTS

2006 FATALITIES

(MORE THAN THE POPULATION OF MIDDLETON)

FATALITIES (1983)

142 FATAL ACCIDENTS

159 FATALITIES

FATALITIES BY CLASS OF VICTIM (1974-1983)

907 DRIVER
544 PASSENGER
351 PEDESTRIAN
162 MOTORCYCLE
41 BICYCLE
1 SNOW MOBILE
2006 TOTAL

1451 OCCUPANT FATALITIES
(APPROXIMATELY THE POPULATION OF OXFORD)

INJURIES (1974-1983)

32,173 INJURY ACCIDENTS

43,002 INJURIES (ALMOST EQUAL TO THE COMBINED POPULATIONS OF SYDNEY, NORTH SYDNEY AND SYDNEY MINES)

INJURIES (1983)

3,300 INJURY ACCIDENTS

4,300 INJURIES

PROPERTY DAMAGE ONLY

159,373 (1974-1983)

15,000 (1983)

POTENTIAL REDUCTION OF FATALITIES AND INJURIES BY SEAT BELT USE

DURING THE TEN (10) YEAR PERIOD 1974 TO 1983 784 OF THE 1451 OCCUPANT FATALITIES COULD HAVE BEEN PREVENTED BY THE USE OF SEAT BELTS. THAT IS 54%.

TRANSPORT CANADA STUDIES INDICATE THAT SEAT BELT USE COULD PREVENT UP TO 60% OF OCCUPANT FATALITIES.

69 OF THE 115 OCCUPANT FATALITIES IN 1983 COULD HAVE BEEN PREVENTED BY USE OF SEAT BELTS.

TRANSPORT CANADA STUDIES INDICATE THAT THE USE OF SEAT BELTS SHOULD REDUCE THE NUMBER OF INJURIES BY APPROXIMATELY 15%. THAT IS, 650 INJURIES WOULD HAVE BEEN PREVENTED IN 1983 (15% OF 4300 INJURIES).

ALCOHOL INVOLVED ACCIDENT STATISTICS
NOVA SCOTIA

TEN YEARS 1974-1983

ALCOHOL WAS THE MAJOR CONTRIBUTING FACTOR IN 874 HIGHWAY FATALITIES, OR 44% OF THE TOTAL OF 2006 FATALITIES FROM 1974 TO 1983.

1983

ALCOHOL WAS THE MAJOR CONTRIBUTING FACTOR IN 72 OF THE 159 HIGHWAY FATALITIES IN 1983, THAT IS 45%.

PREVIOUSLY CONVICTED IMPAIRED DRIVERS

FROM 1981 TO 1983, 56 DEATHS OCCURRED AT A RESULT OF IMPAIRED DRIVERS WHO HAD PREVIOUSLY BEEN CONVICTED OF ONE AND IN SOME CASES TWO OR THREE IMPAIRED DRIVING CHARGES.

SUSPENDED - IMPAIRED DRIVERS

FROM 1981 TO 1983, AN AVERAGE OF FOUR FATALITIES PER YEAR WERE THE RESULT OF DRIVERS WHO WERE SUSPENDED FOR IMPAIRED DRIVING CONVICTIONS AND WERE IMPAIRED AT THE TIME OF THE FATAL ACCIDENT.

COST OF HIGHWAY ACCIDENTS
NOVA SCOTIA - 1983

SOME OF THE COST OF ACCIDENTS ARE:

(A) LIVES

(B) INJURIES

(C) PROPERTY DAMAGE

(D) PAIN-SUFFERING-GRIEF

TRANSPORT CANADA USES THE FOLLOWING AVERAGE "COSTS" FOR ACCIDENTS:

(A)	FATAL ACCIDENT	$300,000
(B)	INJURY ACCIDENT	9,400
(C)	PROPERTY DAMAGE ACCIDENT	2,400

HOWEVER, WHO CAN CALCULATE OR PLACE A COST ON THE PAIN AND SUFFERING OF THE INJURED OR GRIEF FOR LOST LOVED ONES.

COSTS FOR 1983

159 LIVES (142 FATAL ACCIDENTS)
4300 INJURIES (3300 INJURY ACCIDENTS)
15000 PROPERTY DAMAGE ACCIDENTS

$ COSTS FOR 1983 ACCIDENTS

142 FATAL x 300,000	=	$43 MILLION
3300 INJURY x 9,400	=	31 MILLION
15000 PDO x 2,400	=	36 MILLION
TOTAL		$110 MILLION

ACCIDENT STATISTICS
CANADA

FATALITIES (1974-1983)

THERE WERE APPROXIMATELY 53,000 HIGHWAY FATALITIES IN CANADA IN THE TEN (10) YEAR PERIOD 1974 TO 1983.

INJURIES (1974-1983)

THERE WERE MORE THAN 2.3 MILLION INJURY VICTIMS IN HIGHWAY CRASHES IN CANADA FROM 1974 TO 1983.

TAXI EXEMPTIONS
EXISTING CANADIAN SEATBELT LAWS
MARCH, 1984

NEWFOUNDLAND

A DRIVER OPERATING A TAXICAB FOR HIRE IS EXEMPT FROM THE REQUIREMENTS TO RESTRAIN CHILDREN UNDER FIVE (5) YEARS OF AGE (OR UNDER 18 KG) WITHIN THE LIMIT OF A CITY OR MUNICIPALITY.

NEW BRUNSWICK

THE DRIVER OF A TAXICAB OPERATING FOR HIRE IS EXEMPT FROM THE REQUIREMENTS TO RESTRAIN CHILDREN UNDER 16 YEARS OF AGE.

QUEBEC

THE DRIVER OF A TAXI IS EXEMPT FROM THE REQUIREMENT TO USE A SEAT BELT WHEN THE TAXI IS "IN SERVICE".

ONTARIO

THE DRIVER OF A TAXICAB TRANSPORTING A PASSENGER FOR HIRE IS EXEMPT FROM:

A) THE REQUIREMENT TO WEAR A SEAT BELT AND

B) THE REQUIREMENT TO RESTRAIN INFANTS OR TODDLERS.

OWNERS OF TAXICABS ARE EXEMPT FROM THE REQUIREMENTS TO MAINTAIN

A) THE UPPER TORSO RESTRAINT FOR THE DRIVER SEATING POSITION AND

B) A SEAT BELT FOR THE CENTRE FRONT SEAT POSITION.

MANITOBA

THE DRIVER OF A TAXICAB TRANSPORTING A PASSENGER FOR HIRE IS EXEMPT FROM THE REQUIREMENTS TO:

A) USE HIS SEAT BELT AND

B) TO ENSURE THAT PASSENGERS UNDER 18 YEARS OF AGE ARE PROPERLY RESTRAINED.

SASKATCHEWAN

THE DRIVER OF A TAXICAB WHILE TRANSPORTING PASSENGERS FOR COMPENSATION IS EXEMPT FROM THE REQUIREMENTS TO WEAR HIS SEAT BELT AND THE REQUIREMENT TO ENSURE THAT CHILDREN ARE RESTRAINED.

BRITISH COLUMBIA

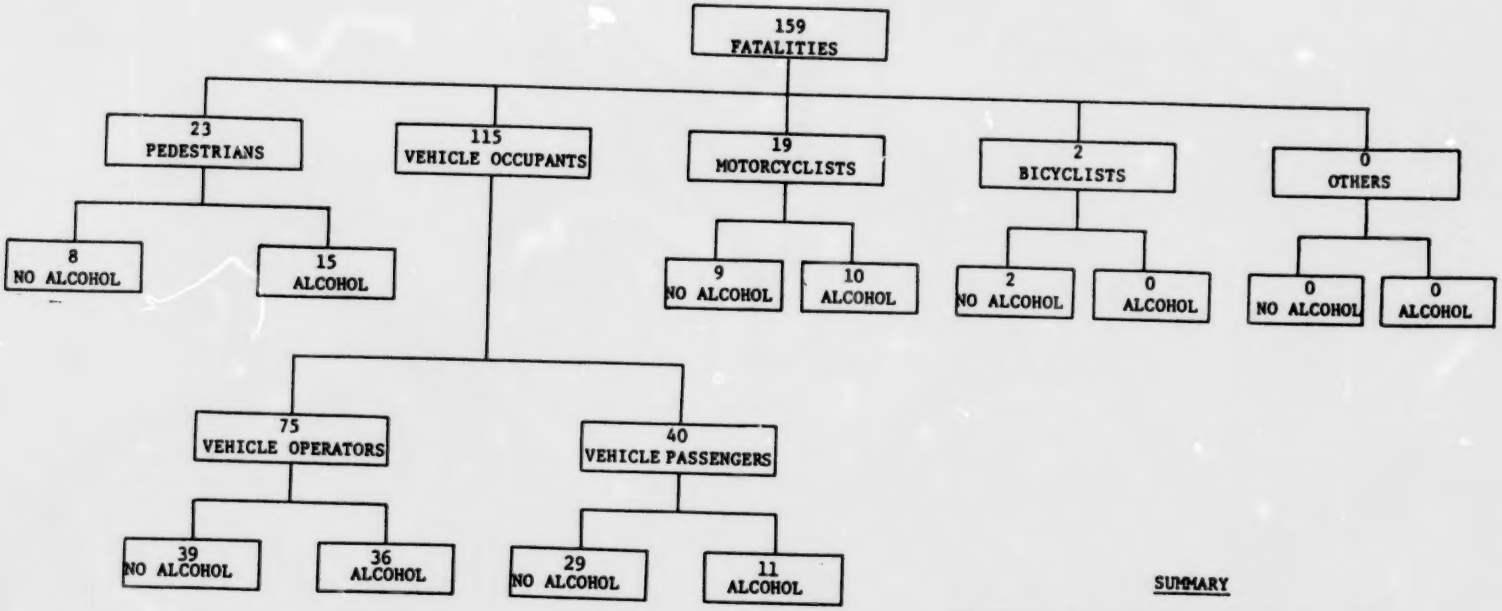
A TAXI DRIVER IS EXEMPT FROM THE REQUIREMENT TO WEAR A SEAT BELT WHILE OPERATING A TAXI ON A HIGHWAY AT A SPEED OF LESS THAN 70 KM/H.

A TAXI DRIVER TRANSPORTING A PASSENGER FOR HIRE IS EXEMPT FROM THE REQUIREMENTS TO ENSURE THAT CHILDREN WHO ARE SIX (6) YEARS OF AGE OR OLDER BUT UNDER 16 YEARS OF AGE ARE PROPERLY SECURED.

NOTE: THE BRITISH COLUMBIA SEAT BELT LAW DOES NOT REQUIRE CHILDREN UNDER SIX (6) YEARS OF AGE TO BE RESTRAINED.

ALCOHOL INVOLVEMENT IN COLLISION FATALITIES

NOVA SCOTIA 1983



SUMMARY

87 (55%) FATALITIES DID NOT INVOLVE ALCOHOL

72 (45%) FATALITIES INVOLVED ALCOHOL

ALERT and Breathalizer Data

- ALERT (Alcohol Level Evaluation Road Tester)
- RCMP have 75 ALERT units in Nova Scotia (one at each detachment and 3 at larger detachments)
- For demonstration of ALERT call S/Sgt. Ralph Steeves at 426-7790
- Halifax has one ALERT but does not use it yet
- Town of Hantsport has one ALERT
- RCMP have a breathalizer in each detachment (42 detachments)
- Most Towns and Cities in Nova Scotia have breathalizers

ALCOHOL CRIMINAL CODE CONVICTIONS

iscal Years Ending March 31

	1979	1st.	2nd.	3rd.	1980	1st.	2nd.	3rd.	1981	1st.	2nd.	3rd.	1982	1st.	2nd.	3rd.	1983 to January 31, 1984
Section 234	247	168	63	16	251	173	57	21	439	302	100	37	398	270	94	34	333
Section 235	1973	1365	458	150	2041	1399	506	136	3772	2642	956	174	1990	1311	516	163	1442
Section 236	3121	2468	532	121	3298	2586	572	140	3908	3064	678	166	3352	2656	574	122	2726
TOTALS	5341				5590				8119				5740				4501

Section 234 - Driving while impaired

Section 235 - Refusal of Breathalizer

Section 236 - BAL in excess 0.08

SEAT BELT QUESTIONS

QUESTION: Is it necessary to wear seat belts for short trips in low speed urban areas?

ANSWER: Most fatal accidents occur within 25 miles of home. Fatal injuries have been sustained by unbelted occupants at speeds as low as 12 mph.

QUESTION: I drive a vehicle on a delivery route, must I buckle up?

ANSWER: On the trip to the drop-off area - Yes.
If your speed does not exceed 25 mph in the delivery area and you are frequently getting in and out of your vehicle, you are exempt.

QUESTION: I suffer from claustrophobia. Must I buckle up?

ANSWER: If for physical or psychological reasons you feel you can't buckle up, and your doctor considers there are valid medical grounds, he can provide you with an exemption.

QUESTION: Are all car drivers responsible for their passengers "buckling up"?

ANSWER: Drivers are responsible for children under sixteen. Adult passengers are themselves responsible.

QUESTION: If an adult transports five or six children to school or hockey practice and there aren't enough seat belts, what should be done?

ANSWER: All available seat belts must be used. The extra children do not have to be restrained.

QUESTION: My car does not have seat belts, must I install them?

ANSWER: No, if vehicle is 1970 model or older.
Yes, if vehicle is 1971 model or newer.

QUESTION: The seat belts in my car are not working. Must I have them repaired?

ANSWER: Yes, the owner of a car is responsible for the maintenance of seat belts in propoer working order.

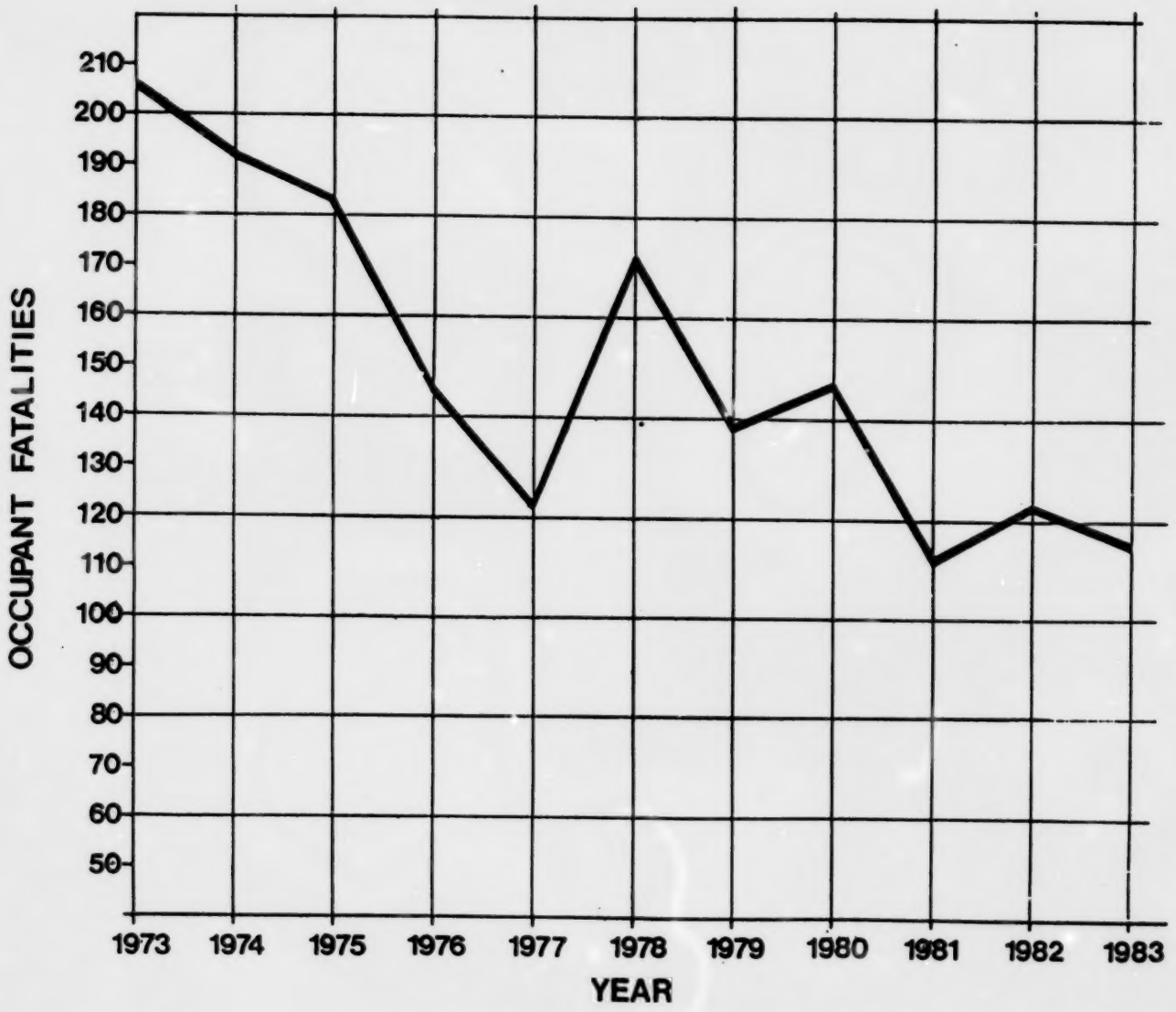
WHAT IS THE HIGHWAY SAFETY PROBLEM IN NOVA SCOTIA?

— 170 FATALITIES IN 1982

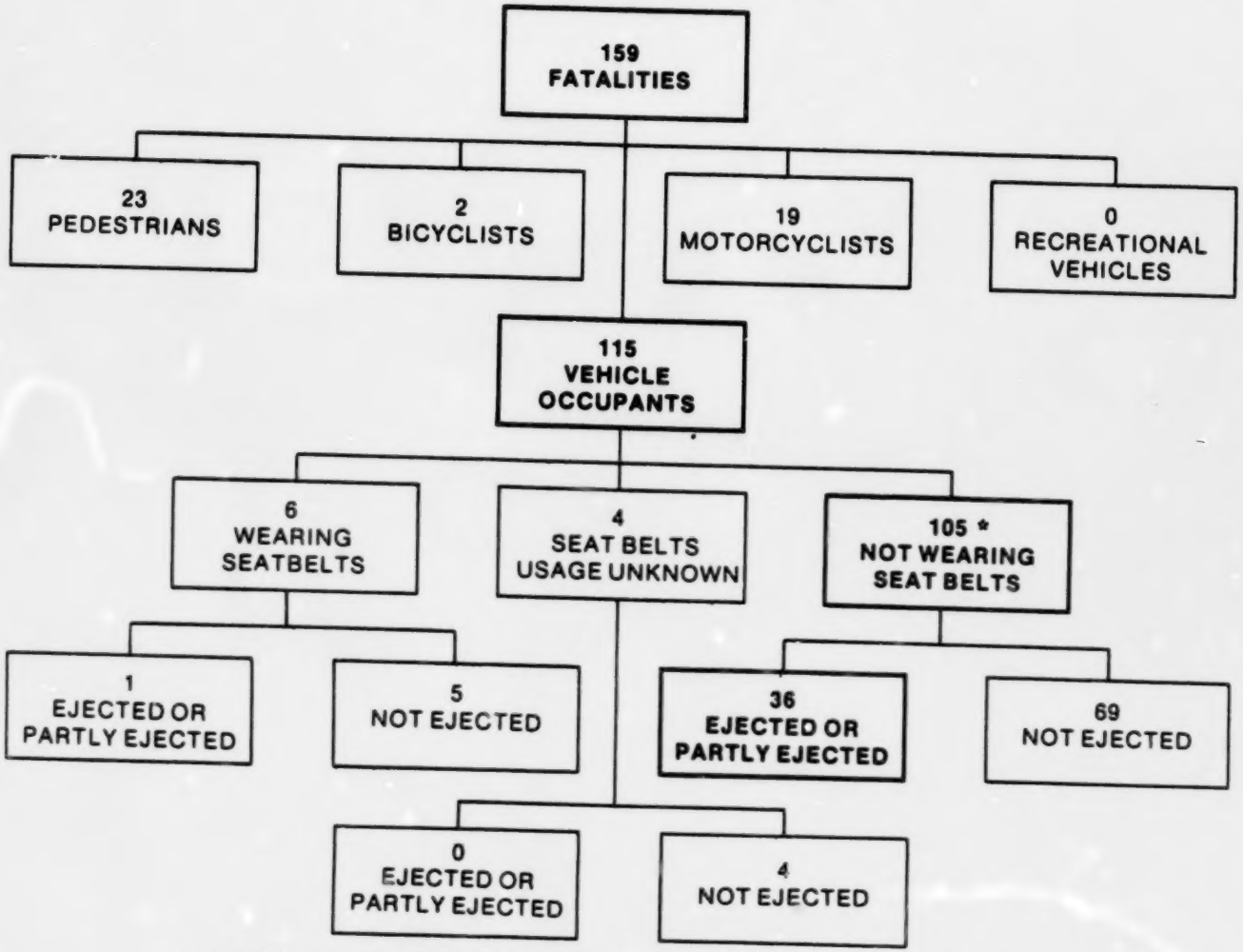
— 159 FATALITIES IN 1983

— 4355 INJURIES IN 1982
(1983 UNAVAILABLE)

SLIDE SHOW


OCCUPANT FATALITIES
210
200
190
180
170
160
150
140
130
120
110
100
90
80
70
60
50
1973
1974
1975
1976
1977
1978
1979
1980
1981
1982
1983
YEAR

NOVA SCOTIA - 1983



* 69 WOULD HAVE LIVED IF WEARING SEAT BELTS.

NOVA SCOTIA - 1983

AGE GROUP	OCCUPANT FATALITIES
0 - 5	1
6 - 10	2
11 - 15	0
16 - 20	20
21 - 25	17
26 -+	75
TOTAL	115

MOTOR VEHICLE OCCUPANTS ADMITTED
TO I.W.K. APRIL 1978 TO MARCH 1983

AGE GROUP	NUMBER FOR 5 YEARS	AVERAGE PER YEAR
0 - 4	17	3.4
5 - 10	21	4.2
11 - 15	19	3.8
	57	11.4

HOW WOULD SEAT BELT LAW HAVE AFFECTED FATAL ACCIDENTS IN 1983?

— 69 fatalities would have been prevented by 100% restraint usage.

— 31 of these would have actually used restraints. (Using analysis of driving records as an indicator of consistent record of compliance with MVA laws).

— 650 (15% of injuries) would have been prevented.

DOLLAR SAVINGS TO NOVA SCOTIA

$7.75 million from 31 fatalities at $250,000

$1.95 million from 650 injuries at $3,000

$9.7 million Total

HOW DO OCCUPANT RESTRAINTS PREVENT DEATH AND REDUCE SEVERITY OF INJURY?

1 They prevent ejection
(36 unbelted occupants were killed when ejected in 1983).

2 They reduce or prevent severity of the occupant impact with the vehicle interior.

METHODS TO INCREASE THE USE OF AVAILABLE RESTRAINTS

1. EDUCATION

2. MECHANICAL WARNING DEVICES

3. LEGISLATION

GREAT BRITAIN

— LAW EFFECTIVE (FRONT SEAT ONLY) JANUARY 1983

— 25% DECREASE IN DEATHS AND SERIOUS INJURIES

— WHEN REAR SEAT LAW IS ENACTED THEY EXPECT TO SAVE 75% OF REAR SEAT PASSENGERS AND AN EXTRA 6% OF FRONT SEAT PASSENGERS.

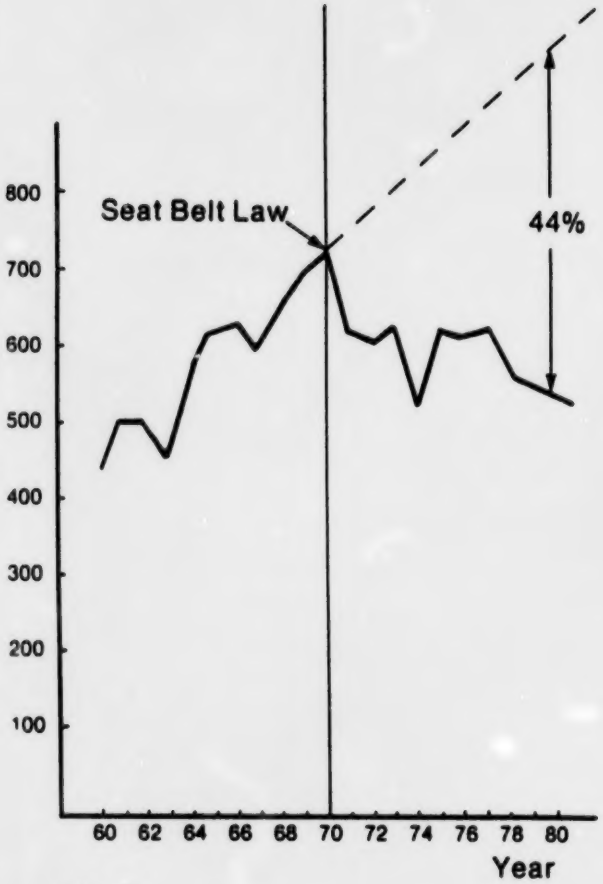


Fig. 1
VEHICLE OCCUPANTS KILLED - VICTORIA

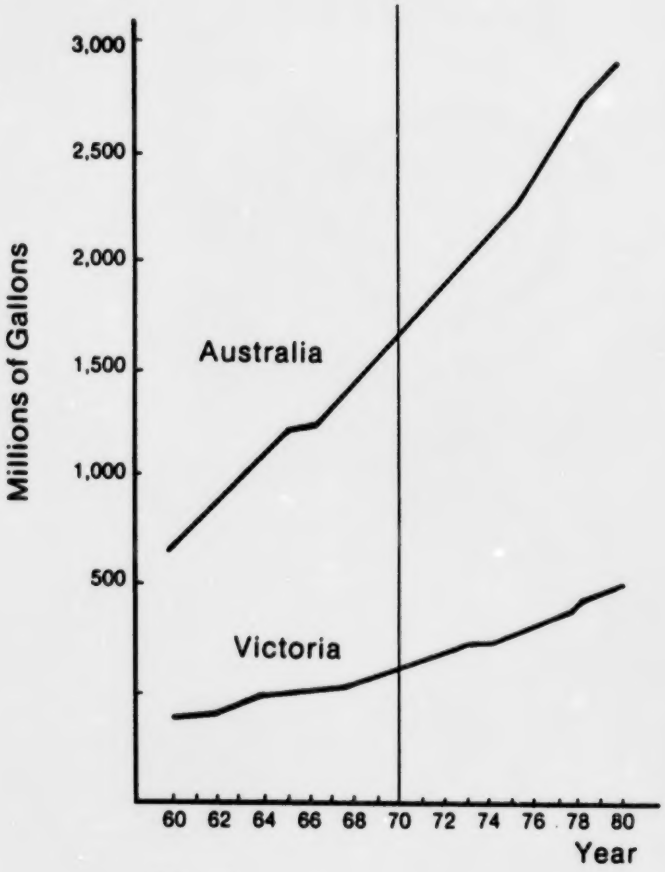


Fig. 4
PETROL CONSUMPTION

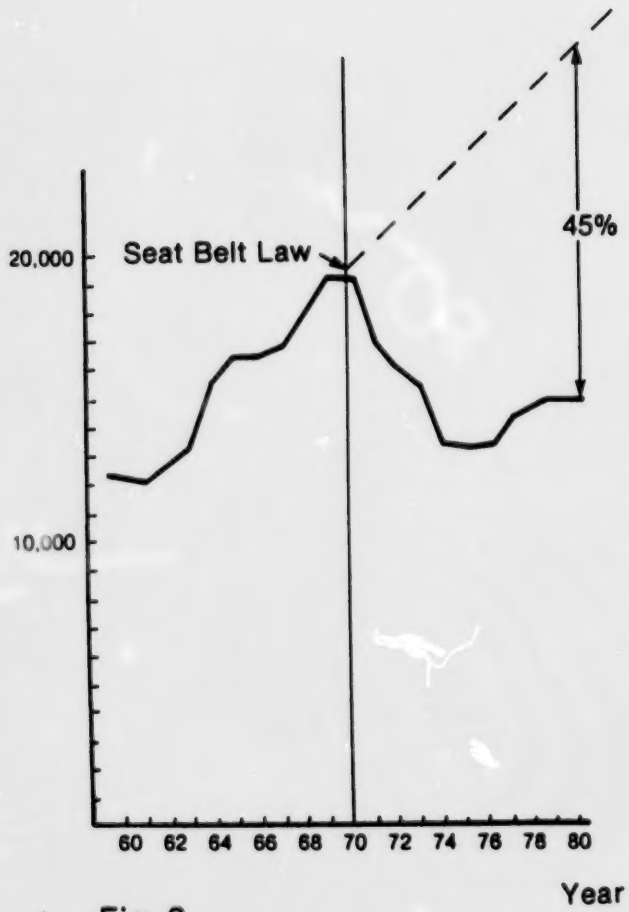


Fig. 2
VEHICLE OCCUPANTS INJURED - VICTORIA

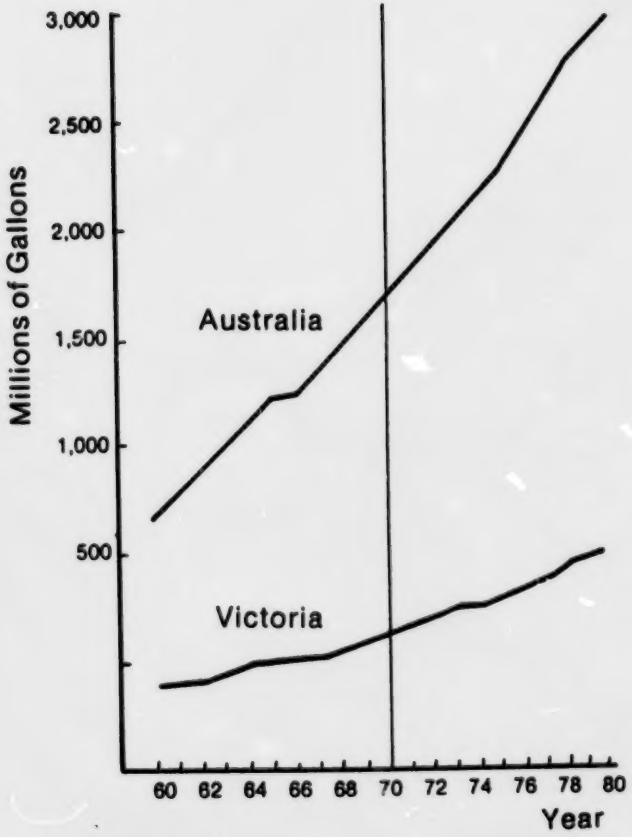


Fig. 4
PETROL CONSUMPTION

VOLVO STUDY - SWEDEN

- 28780 ACCIDENTS
- 37511 FRONT SEAT PASSENGERS
- **NO** DEATHS OF RESTRAINED OCCUPANTS AT SPEEDS UNDER 60 MPH
- DEATHS OF UNRESTRAINED OCCUPANTS AT SPEEDS AS LOW AS 12 MPH

HISTORY OF LEGISLATION - CANADA

PROVINCE	WHEN?	USAGE RATE? (NOVEMBER 1983)
ONTARIO	1976	60%
QUEBEC	1976	60%
SASKATCHEWAN	1977	54%
BRITISH COLUMBIA	1977	67%
NEWFOUNDLAND	1982	76%
NEW BRUNSWICK	1983	66%
MANITOBA	1984	11%
ALBERTA	?	18%
NOVA SCOTIA	?	12%
PRINCE EDWARD ISLAND	?	6%
SUMMARY		
CANADA		52%
PROVINCES WITH BELT LAW		61%
PROVINCES WITHOUT BELT LAW		15%

"STANDARD" EXEMPTIONS FOR RESTRAINT USAGE

— when driving in reverse

— when all available seat positions with restraints are occupied

— when involved in pick-up and delivery work at speeds below 25 mph

— because of persons size or physical characteristics

— when holding a certificate of exemption from a physician

— police officers when transporting prisoners

RESPONSIBILITIES REQUIRED BY SEAT BELT LAWS

DRIVER

- must use available seat belt
- must make sure every minor in the vehicle wears available seat belts
- must make sure every child is properly secured in an appropriate child restraint

PASSENGER

- must wear available seat belts

OWNER

- prohibited from removing seat belts from vehicle
- must replace broken, worn or previously removed seat belts

PENALTIES FOR SEAT BELT INFRACTIONS

NEW BRUNSWICK	$25 - $100
NEWFOUNDLAND	$25 - $500
MANITOBA	$20 - $100

THE INFANT CARRIER

Children under 20 lbs.

THE CHILD SAFETY SEAT

Toddlers 20 to 40 lbs.

CONVERTIBLE SEATS

Birth to 40 lbs.

LAP BELTS AND BOOSTER CUSHIONS

Children who have outgrown their child seats.

BUCKLE-UP BABY PROGRAM

— 12000 births per year in Nova Scotia

— 1400 rental seats in program

— 95-100% of seats in use at anytime

— Womens Institutes of Nova Scotia and Junior League of Halifax have received approximately $23,000 assistance from NSDOT for purchase of infant seats

ORGANIZATIONS SUPPORTING SEAT BELT LAW

- Stellarton Town Council
- The Catholic Women's League of Canada
- Izaak Walton Killam Hospital for Children (three letters)
- The Board of the Halifax Protestant Infants Foundation
- Nova Scotia Family & Child Welfare Association
- Women's Institute of Nova Scotia
- Canadian Institute of Child Health
- Office of the City Clerk (Halifax)
- Canadian Paraplegic Association
- Kingston Red Cross
- Canadian Society of Safety Engineering
- Insurance Bureau of Canada
- Medical Society of Nova Scotia
- Institute of Transportation Engineers (Atlantic Provinces Section)
- Nova Scotia Safety Council
- Association of Professional Engineers of Nova Scotia
- Junior League of Halifax
- Police Association of Nova Scotia

SEAT BELT USAGE REDUCES

— The incidence of death and injury

— The severity of injury

— The number of hospital admissions

— The length of stay in hospital

— The demand on rehabilitation services

QUESTION: Should pregnant women wear seat belts?

ANSWER: Yes. Studies have shown that the most frequent cause of the death in car crashes of the unborn child is the death of the mother.

QUESTION: Is it better to be "thrown clear" in a serious crash?

ANSWER: 36 people were killed in Nova Scotia in 1983 when they were ejected from their vehicles.

When you are "thrown clear" you may be killed by -

1) being thrown through the windshield

2) striking another vehicle occupant

3) being crushed by the car

4) high speed impact with the road on some solid object

QUESTION: Isn't the legislated use of seat belts an infringement on my human rights? Won't I be the only one to suffer?

ANSWER: Any law infringes on freedom of choice to some extent. Highways are built with public funds and the possession of a drivers license is a privilege, not a right.

— The belted driver is not thrown from his seat and will be able to better control his vehicle to avoid danger to other road users.

— The unbelted occupant often becomes a deadly projectile during an accident, killing other vehicle occupants.

— The cost of treating the injury of unbelted occupants is borne by the general public.

— Insurance settlements to persons disabled as a result of not using available seat belts result in increased insurance rates for all drivers.

QUESTION: What if I'm wearing a seat belt and my car catches fire or sinks in water following an accident?

ANSWER: Fire and submersion accidents account for a small number, approximately one percent of accidents. With your seat belt on, you have less chance of being seriously injured or knocked unconscious and will be better able to escape a burning or sinking car.

SEAT BELT EXEMPTIONS
NOVA SCOTIA - NEW BRUNSWICK - NEWFOUNDLAND

EXEMPTION	Is Exemption Included In Provincial Legislation?		
	Nova Scotia	New Brunswick	Newfoundla
1. Person employed in pick-up and delivery or who must enter and leave a motor vehicle at frequent intervals	Yes	Yes	Yes
2. Persons body size/physical characteristics	Yes	Yes	Yes
3. Certificate of a duly qualified physician	Yes	Yes	Yes
4. On a roadway where the speed limit is 30 mph	Yes	No	No
5. When all seat positions equipped with restraints are occupied	Yes	Yes	Yes
6. Driving in reverse	No	Yes	Yes
7. Rural mail delivery	No	Yes	Yes
8. Taxicab exempt from use of restraints by child passenger	No	Yes (under 16)	Yes (under 5
9. Exemptions concerning children under age 5 in various vehicle types	No	No	Yes
10. Removal of seat belts by police, etc.	No	No	Yes
11. Use of seat belts by police officers performing duty/transporting persons	No	No	Yes
12. Person in police custody	No	No	Yes
13. Employee of driving instruction school while engaged in instruction	No	No	Yes
14. Provincial driver examiner engaged in driver exam	No	No	Yes

person to so ride upon any such vehicle. (1970, c. 53, s. 13) (Effective August 1, 1970)

Clinging to moving vehicles prohibited.

(2) It shall be an offence for any person travelling upon a bicycle, motorcycle, coaster, sled, roller skates, skis or any toy vehicle to cling to or attach himself or his vehicle to any other moving vehicle or street car upon a highway or for the driver of any such moving vehicle or street car to allow or permit any such person to cling to or attach himself or his vehicle to said moving vehicle or street car. (R.S., c. 184, s. 143.)

Headgear.

153 (1) No person shall operate or ride as a passenger on a motorcycle or motor scooter on a highway unless he is wearing adequate protective headgear of a kind prescribed by regulation of the Governor in Council.

(1A) Regulations made under subsection (1) may adopt by reference or otherwise standards or specifications established or approved by the Canadian Standards Association or other testing organization with or without modifications or variations or may require that any headgear conform to the standards or specifications established or approved by the Canadian Standards Association or other testing organization or bear the approval of the Canadian Standards Association or other testing organization. (1970-71, c. 51, s. 23) (Effective May 15, 1971).

Restrictions in riding bicycles.

154 (1) The rider of a bicycle shall not allow the same to proceed in a highway by inertia momentum, with his feet removed from the pedals, nor shall such rider remove both hands from the handle bars while riding the bicycle nor practice any trick or fancy riding on a highway.

Bicycles on sidewalks.

(2) No person shall ride a bicycle, tricycle, or similar machine on a sidewalk; provided, nothing in this Section shall be deemed or construed to prevent the use of velocipedes or similar machines by children on a sidewalk in a public square, park, city or town.

Bicycles to travel to right of highway in single file.

(3) No person shall ride a bicycle on a highway except as near as practicable to the extreme right of the main travelled portion of the highway and no person shall ride a bicycle abreast of or generally parallel to another bicycle in motion on the highway except for the purpose of passing any such other bicycle. (R.S., c. 184, s. 144.)

Roller skates and similar devices restricted.

155 It shall be an offence for a person upon roller skates, to go on a roadway except while crossing on a crosswalk. (R.S., c. 184, s. 145.)

Throwing objects at vehicles.

156 (1) No person shall throw any object at a motor vehicle or at a person in a motor vehicle or on a highway which may cause injury to such vehicle or to any person therein.

Glass, nails, etc., on the highway.

(2) No person shall throw, deposit, or knowingly leave on a highway any glass, nails, tacks, scraps of metal, or other materials that are liable to injure tires of motor vehicles.

Littering highway prohibited.

(3) No person shall throw or otherwise deposit from any vehicle on the highway any litter, refuse, garbage, rubbish or other matter. (R.S., c. 184, s. 146;) (1960, c. 41, s. 5.)

EQUIPMENT

Lighting equipment, when required.

157 (1) Except as provided in this Section, every vehicle upon a highway within this Province during the period from a half hour after sunset to a half hour before sunrise and at any other time when visibility is

so limited by fog, rain, snow or the atmospheric condition or by insufficiency of light as to render not clearly discernible any person on the highway at a distance of one thousand feet ahead shall be equipped with lighted head lamps and lighted rear lamps as in this Section respectively required for different classes of vehicle and subject to exemption with reference to lights on parked vehicles as declared in subsection (10). (1972, c. 45, s. 8) (Effective June 1, 1972).

Head lamps on motor vehicles.

(2) Every motor vehicle other than a motorcycle, roadroller, road machinery, or farm tractor shall be equipped with not fewer than two head lamps, at the front of and on opposite sides of the motor vehicle which head lamps shall comply with the requirements and limitations set forth in Section 160 or Section 161 or any regulations that may be made under Section 178.

Head lamps on motorcycles.

(3) Every motorcycle shall be equipped with at least one and not more than two head lamps which shall comply with the requirements and limitations set forth in Section 160 or Section 161 or any regulations that may be made under Section 178.

Tail lights.

(4) Every motor vehicle and every trailer or semi-trailer that is being drawn at the end of a train of vehicles shall be equipped at the rear with

(a) a lamp that exhibits a red light plainly visible under normal atmospheric conditions from a distance of five hundred feet to the rear of the vehicle, and that is so constructed and placed that the number plate carried on the rear of the vehicle is, under the same conditions, so illuminated by a white light that it can be read from a distance of fifty feet to the rear of the vehicle; or

(b) a lamp that exhibits a red light plainly visible under normal atmospheric conditions from a distance of five hundred feet to the rear of the vehicle and a lamp that so illuminates with a white light the number plate carried on the rear of the vehicle that under the same conditions the number plate can be read from a distance of fifty feet to the rear of the vehicle.

Clearance lamps and reflectors.

(5) Every vehicle, other than a standard passenger motor vehicle, roadroller, road machinery or farm tractor, having a width at any part in excess of eighty inches shall carry two clearance lamps on the left side of the vehicle, one located at the front and displaying a white or yellow light visible under normal atmospheric conditions, from a distance of five hundred feet to the front of the vehicle, and the other located at the rear of the vehicle and displaying a red light visible under like conditions from a distance of five hundred feet to the rear of the vehicle. A vehicle requiring clearance lamps hereunder may in lieu of such clearance lights be equipped with adequate reflectors conforming as to color and marginal location to the requirements for clearance lights, and of a type which has been approved by the Department. No such reflector shall be deemed adequate unless it is so designed, located as to height and maintained as to be visible for at least five hundred feet when opposed by a motor vehicle displaying lawful undimmed headlights at night on an unlighted highway.

Lamps on Bicycles.

(6) Every bicycle shall be equipped with a lighted lamp on the front thereof visible under normal atmospheric conditions from a distance of at least three hundred feet in front of the bicycle and shall also be equipped with a reflex mirror or lamp on the rear exhibiting a red light visible under like conditions from a distance of at least two hundred feet to the rear of such bicycle.

Lamps on other vehicles.

(7) All vehicles not heretofore in this Section required to be equipped with specified lighted lamps shall carry one or more lighted lamps or lanterns displaying a white light visible under normal atmospheric conditions from a distance of not less than five hundred feet to the front and rear of the vehicle or displaying white lights to the front and a red light to the rear, each visible under like conditions from a distance of not less than five hundred feet from the vehicle.

Reflectors.

(8) The Department may by regulation permit a reflector of a type approved by the Minister to be substituted for the lighted lamps required by subsection (7).

Reflectors on vehicles carrying explosives, etc.

(9) The Department may by regulations permit a reflector of a type approved by the Minister to be substituted for the lighted lamps required by this Section on any vehicle engaged in transporting inflammable or explosive loads provided that the driver of the vehicle shall at all times mentioned in subsection (1) carry a special permit issued by the Registrar, setting forth the conditions under which the vehicle may be operated with reflectors in place of lights.

Lamps on parked vehicles.

(10) Whenever a vehicle is parked or stopped upon a highway whether attended or unattended during the times mentioned in subsection (1), there shall be displayed upon the vehicle one or more lamps one of which shall be on the roadway side and project a white, amber or yellow light visible under normal atmospheric conditions from a distance of five hundred feet to the front of the vehicle and one of which lamps shall project a red light visible under like conditions from a distance of five hundred feet to the rear, except that no lights need be displayed upon a vehicle when parked upon a highway where there is sufficient light to reveal any person within a distance of two hundred feet upon the highway.

Side marker lamps or reflectors.

(11) A vehicle exceeding twenty-four feet in length shall display a white marker light of not to exceed four candle-power, or a white reflector, meeting the requirements as to visibility of subsection (4), on both the right and left sides, and any combination of vehicles exceeding twenty feet in length shall display on both the right and left sides such marker lights or reflectors at intervals of not to exceed twenty feet. Other vehicles may but are not required to display such marker lights or reflectors. (R.S., c. 184, s. 147; (1957, c. 34, s. 9; (1960, c. 41, s. 6; (1963, c. 31, s. 6; (1967, c. 57, s. 9.)

(12) Where a motor vehicle is equipped with restraint equipment of the type required by the Motor Vehicle Safety Act (Canada), the operator and passengers in such moving vehicle shall use the restraint equipment in the manner for which it was designed. (not proclaimed)

(13) The Governor in Council may make regulations exempting from the requirements of subsection (12) such operators, passengers and vehicles and such classes of operators, passengers and vehicles as in its discretion it deems fit. (not proclaimed)

(14) The use or non-use of restraint equipment by operators or passengers shall not be evidence of negligence in any civil action. (not proclaimed)

Regulations respecting lighting equipment.

158 The Governor in Council may make regulations prescribing or regulating the number, color, type, strength, location, direction, focus, use and all other matters with reference to clearance lamps, reflectors, side marker lamps and other lighting equipment to be fitted, carried or

REGULATIONS RESPECTING RESTRAINT EQUIPMENT ON MOTOR VEHICLES MADE PURSUANT TO SECTION 157 AND SECTION 178 OF THE MOTOR VEHICLE ACT

1 These Regulations may be cited as the "seat belt regulations".

2 In these Regulations, "restraint equipment" means restraint equipment of the type required by the Motor Vehicle Safety Act (Canada)

3 Where a motor vehicle was equipped with restraint equipment when the motor vehicle was manufactured, no person shall operate the motor vehicle unless it is equipped with restraint equipment.

4 In a prosecution for a violation of Section 3 of these Regulations or of Section 157(12) of the Motor Vehicle Act, a certificate purporting to be signed by the Registrar of Motor Vehicles, and bearing the seal of the Department, that restraint equipment was installed in a motor vehicle as standard equipment at the time of the manufacture of the motor vehicle, is admissible in evidence and is prima facie proof of its contents, without proof of the signature or seal or of the official character of the person who appears to have signed the certificate.

5 The following persons are exempted from the requirements of Section 157(12) of the Motor Vehicle Act:

(a) a person who is occupied or employed in the pick-up and delivery of goods or who provides a service on a door-to-door basis; but this exemption only applies during the course of such occupation or employment;

(b) a person whose occupation or employment requires him to stop and start a motor vehicle, or enter and leave a motor vehicle at frequent intervals; but this exemption only applies during the course of such occupation or employment;

(c) a person who by reason of his body size cannot be secured safely by restraint equipment;

(d) a person who according to the certificate of a duly qualified physician, should not be secured by restraint equipment because of a pregnancy or because of physical impairment, disability, abnormality or other sound medical reason provided that the certificate of the physician is produced for inspection at the request of a peace officer;

(e) a person who is an operator or passenger in a motor vehicle being driven upon a highway or portion thereof where the traffic authority has indicated a maximum rate of speed of 30 miles per hour;

(f) a person who is riding in a motor vehicle in which all seating positions equipped with restraint equipment are occupied by other persons;

6 These Regulations come into force on the day of

New Brunswick Seat Belt Law

Nov. 1, 1983

200.1(1) In this section, "seat belt assembly" means a device or assembly composed of straps, webbing or similar material that restrains the movement of a person in order to prevent or mitigate injury to the person and includes a pelvic restraint or an upper torso restraint or both of them.

200.1(2) No person shall drive on a highway a motor vehicle in which a seat belt assembly required under the provisions of the *Motor Vehicle Safety Act*, chapter 26 (1st supp.) of the Revised Statutes of Canada, 1970, at the time that the vehicle was manufactured or imported into Canada has been removed, rendered partly or

200.1(1) Dans le présent article, «ceinture de sécurité» désigne un dispositif ou ensemble composé de courroies, sangles ou pièces d'équipement similaires, qui restreint les mouvements d'une personne afin de la protéger contre les blessures corporelles ou de les atténuer; l'expression s'entend également d'une ceinture sous-abdominale ou d'une ceinture-baudrier ou des deux.

200.1(2) Nul ne peut conduire sur une route un véhicule à moteur dans lequel une ceinture de sécurité qui devait l'équiper, conformément aux dispositions de la *Loi sur la sécurité des véhicules automobiles*, chapitre 26 (1re supp.) des Statuts revisés du Canada de 1970, au moment où le véhicule a été fabriqué ou importé au Canada, a été

wholly inoperative or modified so as to reduce its effectiveness.

200.1(3) Subject to subsection (5), every person who drives on a highway a motor vehicle in which a seat belt assembly is provided for the driver shall wear the complete seat belt assembly in a properly adjusted and securely fastened manner.

200.1(4) Subject to subsection (5), every person, other than a person under the age of sixteen, who is a passenger in a motor vehicle being driven on a highway and who occupies a seating position for which a seat belt assembly is provided shall wear the complete seat belt assembly in a properly adjusted and securely fastened manner.

200.1(5) Subsections (3) and (4) do not apply to a person

(a) driving a motor vehicle in reverse;

(b) who holds a certificate signed by a medical practitioner certifying that the person

(i) for the period stated in the certificate is unable for medical reasons to wear a seat belt assembly, or

(ii) because of his physical characteristics is unable to wear a seat belt assembly; or

(c) who is actually engaged in work which requires him to alight from and re-enter a motor vehicle at frequent intervals and, while engaged in such work, does not drive or travel in that vehicle at a speed exceeding forty kilometres per hour.

200.1(6) Subject to subsection (7), no person shall drive on a highway a motor vehicle in which there is a passenger who is under sixteen years of age and occupies a seating position for which a seat belt assembly is provided unless that passenger

enlevée, rendue totalement ou partiellement inopérante ou modifiée de façon à réduire son efficacité.

200.1(3) Sous réserve du paragraphe (5), quiconque conduit sur une route un véhicule à moteur équipé d'une ceinture de sécurité pour le conducteur, doit l'utiliser au complet en la réglant proprement et en l'attachant de façon sûre.

200.1(4) Sous réserve du paragraphe (5), toute personne âgée de seize ans et plus, qui est un passager d'un véhicule à moteur circulant sur une route et qui occupe une place assise pourvue d'une ceinture de sécurité, doit l'utiliser au complet en la réglant proprement et en l'attachant de façon sûre.

200.1(5) Les paragraphes (3) et (4) ne s'appliquent pas à quiconque

a) conduit un véhicule à moteur en marche arrière;

b) est porteur d'un certificat signé par un médecin attestant qu'il ne peut utiliser une ceinture de sécurité en raison

(i) de son état de santé, durant la période mentionnée dans le certificat, ou

(ii) de ses particularités physiques; ou

c) exécute effectivement un travail qui l'oblige à descendre d'un véhicule à moteur et à y remonter à intervalles fréquents pour autant que, durant ce travail, la vitesse du véhicule qu'il conduit ou à bord duquel il a pris place comme passager ne dépasse pas quarante kilomètres à l'heure.

200.1(6) Sous réserve du paragraphe (7), nul ne peut conduire sur une route un véhicule à moteur dans lequel se trouve un passager âgé de moins de seize ans, occupant une place assise pourvue d'une ceinture de sécurité, sauf si ce passager, selon le cas,

(a) is wearing the complete seat belt assembly in a properly adjusted and securely fastened manner, or

(b) is occupying and is properly secured in a child seating and restraint system prescribed by regulation,

as the case may be.

200.1(7) Subsection (6) does not apply where the passenger

(a) is the holder of a certificate signed by a medical practitioner certifying that the passenger

(i) for the period stated in the certificate is unable for medical reasons to wear a seat belt assembly, or

(ii) because of his physical characteristics is unable to wear a seat belt assembly; or

(b) is actually engaged in work which requires him to alight from and re-enter the motor vehicle at frequent intervals and, while the passenger is engaged in such work, the motor vehicle does not travel at a speed exceeding forty kilometres per hour.

200.1(8) The Lieutenant-Governor in Council may make regulations

(a) requiring the use of child seating and restraint systems in motor vehicles on highways and prescribing the specifications thereof;

(b) providing for the exemption from any of the provisions of this section of

(i) any type or class of motor vehicles, and

(ii) any class of drivers or passengers in motor vehicles.

a) utilise la ceinture de sécurité au complet en la réglant proprement et en l'attachant de façon sûre, ou

b) occupe un système de siège et de harnais pour enfant prescrit par règlement et y est convenablement attaché.

200.1(7) Le paragraphe (6) ne s'applique pas lorsque le passager

a) est porteur d'un certificat signé par un médecin attestant qu'il ne peut utiliser une ceinture de sécurité en raison

(i) de son état de santé durant la période mentionnée dans le certificat, ou

(ii) de ses particularités physiques; ou

b) exécute effectivement un travail qui l'oblige à descendre du véhicule à moteur et à y remonter à intervalles fréquents pour autant que, pendant qu'il effectue ce travail, la vitesse du véhicule à moteur ne dépasse pas quarante kilomètres à l'heure.

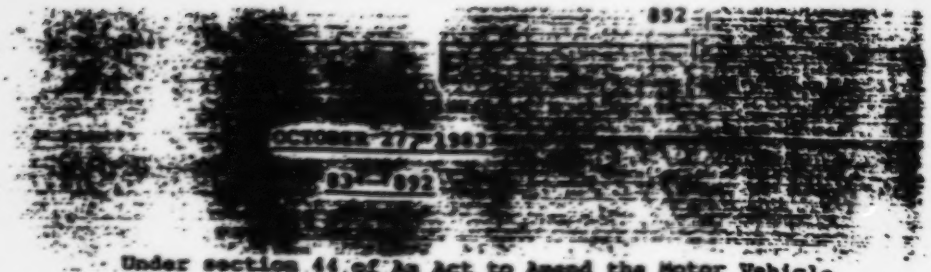
200.1(8) Le lieutenant-gouverneur en conseil peut établir des règlements

a) exigeant l'utilisation des systèmes de sièges et de harnais pour enfants dans les véhicules à moteur circulant sur les routes et prescrivant leurs caractéristiques;

b) dispensant de l'application de tout ou partie des dispositions du présent article

(i) tout genre ou classe de véhicules à moteur, et

(ii) toute classe de conducteurs ou de passagers de véhicules à moteur.



Under section 44 of An Act to Amend the Motor Vehicle Act, Chapter 52 of the Acts of New Brunswick 1983, the Lieutenant-Governor in Council orders a Proclamation to be issued declaring that sections 15 and 32 and paragraph 37(b) of the said Act come into force on November 1, 1983.

G.F.G. Stanley
Lieutenant-Governor

PROCLAMATION

Pursuant to Order in Council 83-892, I declare that sections 15 and 32 and paragraph 37(b) of An Act to Amend the Motor Vehicle Act, Chapter 52 of the Acts of New Brunswick 1983, come into force on November 1, 1983.

This Proclamation is given under my hand and the Great Seal of the Province at Fredericton on October 27, 1983.

G.F.G. Stanley
Lieutenant-Governor

Fernand G. Dubé, Q.C.
Minister of Justice

This is to certify that the foregoing is a true copy of an Order of the Lieutenant-Governor in Council of the Province of New Brunswick, made on the 27th day of October, 1983.

Je certifie que le document qui précède est une copie conforme d'un décret du lieutenant-gouverneur en conseil de la province du Nouveau-Brunswick, pris le

Clerk of the Executive Council / L'adjointe au greffier du Conseil exécutif.

OCTOBER 27, 1983

83 - 893

Under section 200.1 of the Motor Vehicle Act, the Lieutenant-Governor in Council makes the following Regulation:

1 This Regulation may be cited as the Seat Belt Regulation-Motor Vehicle Act.

2 In this Regulation

"Act" means the Motor Vehicle Act.

3 An employee or agent of the Canada Post Corporation while engaged in rural mail delivery is exempt from the provisions of subsection 200.1(3) of the Act.

4 A driver of a taxicab while transporting for hire a passenger under the age of sixteen years is exempt from the provisions of subsection 200.1(6) of the Act.

5 A driver of a motor vehicle is exempt from the provisions of subsection 200.1(6) of the Act before November 1, 1984 if the passenger

(a) is under the age of five years,

(b) weighs eighteen kilograms or less, and

(c) was born before November 1, 1983.

6(1) No person shall drive on a highway a motor vehicle in which there is a passenger

(a) who is under the age of five years, and

(b) who weighs eighteen kilograms or less

unless that passenger is occupying and is properly secured in a child seating and restraint system prescribed under section 7.

6(2) Subsection (1) does not apply until November 1, 1984 with respect to passengers referred to therein who were born before November 1, 1983.

7 A child seating and restraint system

(a) the use of which is in compliance with the manufacturer's specifications as to the weight of the child,

(b) that is installed in accordance with the installation information required by section 17 of the Children's Car Seats and Harnesses Regulations under the Hazardous Products Act, chapter H-3 of the Revised Statutes of Canada, 1970, and

(c) that has indelibly printed on it or permanently affixed to it

(i) the information prescribed by subsections 16(1) and (2) of the Children's Car Seats and Harnesses Regulations under the Hazardous Products Act, chapter H-3 of the Revised Statutes of Canada, 1970, or

(ii) a label stating that it meets the Canadian Motor Vehicle Safety Standard (CMVSS 213.1),

is a prescribed child seating and restraint system for the purposes of paragraph 200.1(6)(b) of the Act.

8 This Regulation comes into force on November 1, 1983.

G.F.G. Stanley
Lieutenant-Governor

This is to certify that the foregoing is a true copy of an Order of the Lieutenant-Governor in Council of the Province of New Brunswick, made on the 7th day of Oct., 19 82

Je certifie que le document qui précède est une copie conforme d'un décret du lieutenant-gouverneur en conseil de la province du Nouveau-Brunswick, pris le

Asst. Clerk of the Executive Council / L'adjointe au greffier du Conseil exécutif

"APPENDIX A"

AN ACT TO AMEND THE HIGHWAY TRAFFIC ACT TO PROVIDE FOR THE COMPULSORY USE OF SEAT BELTS

(Assented to July 14, 1981)

1. The Highway Traffic Act is amended by adding immediately after Section 199 the following:

"PART VI.1

Seat Belt Systems

199.1(1) In this section (a) "seat belt assembly" means a device or assembly composed of straps, webbing or similar material that restrains the movement of a person in order to prevent or mitigate injury to the person and includes a pelvic restraint or a pelvic restraint in combination with a torso restraint; and (b) "child seating and restraint system" means such system as may be prescribed by regulations made under this section.

(2) No person shall operate on a highway a vehicle in which a seat belt assembly required under the provision of the Motor Vehicle Safety Act (Canada) at the time that the vehicle was manufactured or imported into Canada has been removed, rendered partly or wholly inoperative, or modified so as to reduce its effectiveness.

(3) Subject to subsection (5), every person, who operates on a highway a vehicle in which a seat belt assembly is provided for the driver, shall wear the complete seat belt assembly in a properly adjusted and securely fastened manner but, where a seat belt assembly comprises a pelvic restraint and a torso restraint which are not joined, the driver shall be required to wear the pelvic restraint only.

(4) Subject to subsection (5), every person, who is a passenger on a highway in a vehicle in which a seat belt assembly is provided for the seating position occupied by the passenger, shall wear the complete seat belt assembly in a properly adjusted and securely fastened manner but, where a seat belt assembly comprises a pelvic restraint and a torso restraint which are not joined, the passenger shall be required to wear the pelvic restraint only.

(5) Subsections (3) and (4) do not apply to a person (a) driving a vehicle in reverse; (b) who holds a certificate signed by a duly qualified medical practitioner certifying that the person is (i) for the period stated in the certificate, unable for medical reasons to wear a seat belt assembly, or (ii) because of size, build, or other physical characteristic, unable to wear a seat belt assembly; (c) who is actually engaged in work which requires the person to alight from and re-enter a vehicle at frequent

intervals and who, while engaged in the work, does not drive or travel in that vehicle at a speed exceeding fifty kilometres per hour; or (d) under the age of sixteen years.

(6) Subject to subsection (7), no person shall operate on a highway a vehicle in which there is a passenger who (a) has attained the age of five years, or (b) whose weight exceeds eighteen kilograms and who is under sixteen years of age and occupies a seating position for which a seat belt assembly has been provided, unless that passenger is wearing the complete seat belt assembly in a properly adjusted and securely fastened manner.

(7) Subsection (6) does not apply where the passenger (a) is the holder of a certificate signed by a duly qualified medical practitioner certifying that the passenger is (i) for the period stated in the certificate, unable for medical reasons to wear a seat belt assembly, or (ii) because of size, build, or other physical characteristic, unable to wear a seat belt assembly; (b) is actually engaged in work which requires him to alight from and re-enter the vehicle at frequent intervals and the vehicle does not travel at a speed exceeding fifty kilometres per hour; or (c) is occupying and properly secured in a child seating and restraint system as prescribed under the regulations.

(8) Subject to subsection (9), no person shall operate on a highway a vehicle in which there is a passenger who is under five years of age or whose weight does not exceed eighteen kilograms, unless that passenger is occupying and properly secured in a child seating and restraint system as prescribed under the regulations.

(9) Subsection (8) does not apply where the passenger is the holder of a certificate signed by a duly qualified medical practitioner certifying that the passenger is (a) for the period stated in the certificate, unable for medical reasons to be secured in a child seating and restraint system; or (b) because of size, build, or other physical characteristic, unable to be secured in a child seating and restraint system.

(10) The Minister may, with the approval of the Lieutenant-Governor in Council make regulations (a) prescribing the requirements for child seating and restraint systems for the purposes of this Act; and (b) providing for the exemption from any of the provisions of this section of (i) any type or class of vehicle, or (ii) any class of drivers or passengers in vehicles.

(11) Every person who contravenes any provision of this section or the regulations is guilty of an offence and is liable on summary conviction to a fine of not less than twenty-five dollars and not more than five hundred dollars and in default of payment to imprisonment for a term of not less than ten days and not more than three months or to both such fine and imprisonment."

2. Section 199.1 of The Highway Traffic Act or any subsection thereof comes into force on a day to be proclaimed by the Lieutenant-Governor in Council.

APPENDIX "A"

The Child Seating and Restraint System Regulations, 1982

REGULATIONS

1. These regulations may be cited as the Child Seating and Restraint System Regulations, 1982.

2. In these regulations, "Act" means The Highway Traffic Act, Revised Statutes of Newfoundland 1970, as amended.

3. For the purposes of section 199.1 of the Act, a child seating and restraint system is one that complies with the requirements of the Motor Vehicle Safety Regulations under the Motor Vehicle Safety Act (Canada) and has been properly installed in a motor vehicle.

4. For the purposes of subsection (8) and (9) of section 199.1 of the Act, these regulations shall apply only to passengers born on or after the first day of July, 1982.

5. Subsection 8 of Section 199.1 of the Act does not apply:
   (a) where a motor vehicle
      (i) is registered in another province or jurisdiction which does not prohibit the removel or modification of a seat belt assembly in such a motor vehicle; and
      (ii) in which the seat belt assembly was, before the said motor vehicle was brought to the Province, removed or modified such that is would not be practicable or possible to install a child seating and restraint system therein;
   (b) where a motor vehicle is rented for a period of 21 days or less;
   (c) where the motor vehicle is a taxicab while it is transporting for hire a passenger within the limits of a city or municipality;
   (d) where a person comes to the Province with a motor vehicle registered in another jurisdiction and equipped with a seat belt assembly, provided however that this exemption extends for a maximum of 21 days.

6. These regulations shall come into force on the first day of July, 1982.

APPENDIX "A"

The Seat Belt Exemption Regulations, 1982

REGULATIONS

1. These regulations may be cited as the Seat Belt Exemption Regulations, 1982.

2. In these regulations "Act" means the Highway Traffic Act, Revised Statutes of Newfoundland, 1970 as amended.

3. Subsection (2) of Section 199.1 of the Act does not apply to:

   (a) a motor vehicle operated by a police force;

   (b) a motor vehicle that is registered in another province or jurisdiction, provided that if the said motor vehicle has the required seat belt assembly upon arriving in Newfoundland, then no person shall remove it, or render it partly or wholly inoperative, or modify it so as to reduce its effectiveness.

.../2

4. Subsection (3) of Section 199.1 of the Act does not apply to:

(a) a peace officer in the lawful performance of his duties, when compliance with the said subsection would endanger him or hamper the performance of his duties;

(b) a peace officer who, in the lawful performance of his duties, is transporting a person in his custody.

(c) an employee or agent of the Canada Post Office while engaged in rural mail delivery;

5. Subsection (4) of Section 199.1 of the Act does not apply to:

(a) a peace officer in the lawful performance of his duties, when compliance with the said subsection would endanger him or hamper the performace of his duties;

(b) a peace officer who, in the lawful performance of his duties, is transporting a person in his custody;

(c) a person who is in the custody of a peace officer;

.../3

(d) an employee of a driving instruction school while engaged in driving instruction; or

(e) a provincial driver examiner while engaged in driver examination.

6. Subsection (6) of section 199.1 of the Act does not apply to:

(a) a peace officer in the lawful performance of his duties, when compliance with the said subsection would endanger him or hamper the performance of his duties; or

(b) a peace officer who, in the lawful performance of his duties, is transporting a person in his custody.

7. These regulations shall come into force on the first day of July 1982.

ORGANIZATIONS SUPPORTING SEAT BELT LAW

— Stellarton Town Council
— The Catholic Women's League of Canada
— Izaak Walton Killam Hospital for Children (three letters)
— The Board of the Halifax Protestant Infants Foundation
— Nova Scotia Family & Child Welfare Association
— Women's Institute of Nova Scotia
— Canadian Institute of Child Health
— Office of the City Clerk (Halifax)
— Canadian Paraplegic Association
— Kingston Red Cross
— Canadian Society of Safety Engineering
— Insurance Bureau of Canada
— Medical Society of Nova Scotia
— Institute of Transportation Engineers (Atlantic Provinces Section)
— Nova Scotia Safety Council
— Association of Professional Engineers of Nova Scotia
— Junior League of Halifax
— Police Association of Nova Scotia

THE SEAT BELT LAW EXPLAINED

RESTRICTED - NOT FOR PUBLIC DISTRIBUTION.

NOTES FOR ENFORCEMENT PERSONNEL ON THE SEAT BELT LAW AND CHILD SEATING AND RESTRAINT REGULATIONS.

EFFECTIVE
JULY 1, 1982

MOTOR REGISTRATION DIVISION
VIKING BUILDING
ST. JOHN'S

The exact wording of the Act and Regulations is contained in Appendix A, however, it may be confusing for anyone who is not entirely familiar with seat belt language.

This publication will attempt to "translate" the law in more comprehensible terms and provide easy reference when faced with a particular situation.

1. WHICH VEHICLES MUST HAVE SEAT BELTS

All motor vehicles manufactured in Canada or imported into Canada must conform to the requirements of the Motor Vehicle Safety Act (Canada). Since 1971 this Act has required the manufacturer to install seat belts in various positions in different classes of motor vehicles. The seat belt law applies only to positions for which seat belts were required to be installed by the manufacturer. You will, no doubt, find seat belts in some older model vehicles back in the sixties, however, the law does not apply to these vehicles.

If the seat belts have been removed, they must be re-installed. It is an offence to remove, render partly or wholly inoperative or modify any seat belt required to be fitted to a vehicle. (Except a vehicle registered in another jurisdiction which had the belts removed before entering Newfoundland. However, such vehicle must comply upon being registered in this Province.)

Appendix B shows the years in which various classes of vehicles were required to be fitted with seat belts and the positions in which these belts were required.

2. WHO MUST WEAR SEAT BELTS

Every driver and every passenger who is five years of age or whose weight is eighteen kilograms (40 lbs.) and occupies a position where there is a seat belt must wear the belt.

If the seat belt assembly is of the older design with separate lap and shoulder belts, only the lap belt is required to be worn.

If the passenger is under sixteen years of age he is required to wear both lap and shoulder belts.

3. EXEMPTIONS

(a) In vehicles where belts were not installed by the manufacturer.
(b) Driving in reverse.
(c) Medical condition for which the driver or passenger can produce a certificate from a doctor.
(d) Children born before July 1, 1982. After they become five years of age or weight 18 kg they must wear a seat belt.
(e) When engaged in work which requires frequent stops and the speed does not exceed 50 km/h.
(f) A police officer, where by complying with the law, he would be hampered or endangered in performing his duties.
(g) A police officer while transporting a person in custody.
(h) A person in the custody of a police officer.
(i) A mail delivery employee while engaged in rural mail delivery.
(j) A driving school instructor while engaged in driving instruction.
(k) A driver examiner while conducting a driver examination.
(l) A driver or passenger while being transported in a vehicle registered in another jurisdiction and from which the seat belts have been removed.

4. CHILD SEATING RESTRAINT REQUIREMENTS

There are three different systems available in which to transport children.

(a) Infant Carrier - Infants under 9 kg (20 lbs)
(b) Convertible Seats - Birth to 18 kg (40 lbs)
(c) Child Seat - 9 kg to 18 kg

All children born after June 30, 1982, must be secured in either an infant carrier or a convertible car seat adjusted to the rear-facing position while riding in vehicles where there is a seating position available, fitted with a seat belt.

Figure 1 shows an infant carrier which is intended for use for babies up to 9 kg. It consists of a basket-like device which is rearfacing, thereby supporting the baby's back and head in the most common and most severe configuration of collision, the head-on crash.

Figure 1

Infant carriers are secured in the vehicle by a lap belt, as shown below.

Figure 2 shows the convertible seats because they will accommodate infants under 9 kg (20 lbs) in a rear-facing position with the seat secured by a lap belt (Figure 2(a)) and children from 9 kg to 18 kg (20 to 40 lbs) in a forward facing position with the seat secured by a lap belt and, in most cases, a top tether strap. The tether strap is attached to the top of the seat and is hooked to some solid metal surface behind the safety seat as shown in Figure 2(b).

Figure 2(a)
Convertible Car Seats
(Rear-facing)

Figure 2(b)
Convertible Car Seats
(Forward facing

If the convertible seat is being used in the forward facing configuration in the front seat, the tether strap may be anchored to the lap belt in the rear seat. (Figure 2(c))

Figure 2(c)

The purpose of the tether strap is to reduce the chance of the child's head contacting the interior of the vehicle as a result of forward or lateral movement of the top of the safety seat.

Figure 3 shows a child restraint used for older children. These are forward facing and can accommodate children who weigh between 9 to 18 kg (20 to 40 lbs). They are secured by the lap belt and, in most cases, a top tether strap.

Figure 3

TODDLERS 9 TO 19 KG (20 to 40 lbs)

It is a recommended safety practice that children ride in the back seat. All harness straps are to be adjusted and properly buckled.

All safety seats sold in Canada must comply with requirements of Regulations made under the authority of the Motor Vehicle Safety Act (Canada). These seats should display a sticker which indicates such compliance. Infant carrier approvals will not be complete until September 1982, therefore, some types of infant carriers will not have such a sticker until products sold after that date come on the market.

There are two important factors to remember with respect to child restraints:

(a) they apply only to children born after June 30, 1982,
(b) they apply only to children for whom a seating position fitted with a seat belt is available.

A seating position fitted with a seat belt would not be available if:

(a) it is already occupied by someone else:
(b) the vehicle is a station wagon which has been converted to the cargo carrying configuration by folding down the rear seat;
(c) seat belts are not provided in an older model vehicle.

5. EXEMPTIONS FROM THE CHILD SEATING AND RESTRAINT REGULATIONS

(a) Where a motor vehicle is registered in another jurisdiction where it is legal to remove a seat belt assembly it is permissible to operate that vehicle without a child restraint system.

(b) Where the vehicle is registered in another jurisdiction and the seat belt assembly is not removed the operator is exempt from having a child restraint system for a period of 21 days.

(c) A motor vehicle which is rented is exempt from the requirement of a child restraint system provided that the rental is for 21 days or less.

(d) When a passenger, who is required to be seated in a child seating restraint system is being transported in a taxi.

6. THE INTENT OF THE CHILD RESTRAINT REGULATIONS

Unlike the seat belt law, where people are asked to use equipment already available, the child restraint regulations require people to purchase equipment and install it in their vehicle. Therefore, a substantial period of time will be appropriate before enforcement begins. This will allow people time to fully learn how the regulations apply and how car seats are to be used.

There will also be a period of several months before it will become obvious to police to whom the law applies. For example, by January 1, 1983, it will be obvious that really tiny babies will have been born after June 30, 1982. By July 1, 1983, most children born before July 1, 1982, will be able to walk and so on.

Eventually, when all children are affected by the law (in approximately five years) there will be no need to worry about age or weight. If the child is not in a restraint of some type, then a violation is evident.

Another aspect of enforcement is the discretionary powers necessary to deal with unusual situations. It is simply not practical to write regulations in such a way as to properly deal with all situations. This is particulary true with the child restraint regulations.

Some examples where police discretion will be essential are:

(a) When an infant is being transported in a vehicle owned by a person other than a parent or legal guardian and no infant seat is available.

Example - out of province visitors;
- parent and infant are given a ride from some location other than where the infant's seat is available.

(b) Very small children who have been temporarily removed from the car seat because they are ill, upset, or are nursing.

Examples of situations where the issuing of tickets will be appropriate are:

(a) Children leaning out the window.

(b) A parent driving with one arm "restraining" a child standing on the seat beside them.

(c) An adult holding a small child on their lap and the adult is not wearing a seat belt.

(d) An adult has fastened a seat belt around both themselves and a child on their lap.

Because of the importance of properly anchoring the tether strap to obtain maximum benefit from the car seat, it will be appropriate for police to note situations where the tether is not anchored in the family vehicle and, for the first several months at least, warn the parents of the requirements.

For further information, contact:

Seat Belt Education Program
Motor Registration Division
Viking Building, Crosbie Road
St. John's, Newfoundland
A1C 5T4

Phone: 737-2520

"APPENDIX A"

AN ACT TO AMEND THE HIGHWAY TRAFFIC ACT TO PROVIDE FOR THE COMPULSORY USE OF SEAT BELTS

(Assented to July 14, 1981)

1. The Highway Traffic Act is amended by adding immediately after Section 199 the following:

"PART VI.1

Seat Belt Systems

199.1(1) In this section (a) "seat belt assembly" means a device or assembly composed of straps, webbing or similar material that restrains the movement of a person in order to prevent or mitigate injury to the person and includes a pelvic restraint or a pelvic restraint in combination with a torso restraint; and (b) "child seating and restraint system" means such system as may be prescribed by regulations made under this section.

(2) No person shall operate on a highway a vehicle in which a seat belt assembly required under the provision of the Motor Vehicle Safety Act (Canada) at the time that the vehicle was manufactured or imported into Canada has been removed, rendered partly or wholly inoperative, or modified so as to reduce its effectiveness.

(3) Subject to subsection (5), every person, who operates on a highway a vehicle in which a seat belt assembly is provided for the driver, shall wear the complete seat belt assembly in a properly adjusted and securely fastened manner but, where a seat belt assembly comprises a pelvic restraint and a torso restraint which are not joined, the driver shall be required to wear the pelvic restraint only.

(4) Subject to subsection (5), every person, who is a passenger on a highway in a vehicle in which a seat belt assembly is provided for the seating position occupied by the passenger, shall wear the complete seat belt assembly in a properly adjusted and securely fastened manner but, where a seat belt assembly comprises a pelvic restraint and a torso restraint which are not joined, the passenger shall be required to wear the pelvic restraint only.

(5) Subsections (3) and (4) do not apply to a person (a) driving a vehicle in reverse; (b) who holds a certificate signed by a duly qualified medical practitioner certifying that the person is (i) for the period stated in the certificate, unable for medical reasons to wear a seat belt assembly, or (ii) because of size, build, or other physical characteristic, unable to wear a seat belt assembly; (c) who is actually engaged in work which requires the person to alight from and re-enter a vehicle at frequent

intervals and who, while engaged in the work, does not drive or travel in that vehicle at a speed exceeding fifty kilometres per hour; or (d) under the age of sixteen years.

(6) Subject to subsection (7), no person shall operate on a highway a vehicle in which there is a passenger who (a) has attained the age of five years, or (b) whose weight exceeds eighteen kilograms and who is under sixteen years of age and occupies a seating position for which a seat belt assembly has been provided, unless that passenger is wearing the complete seat belt assembly in a properly adjusted and securely fastened manner.

(7) Subsection (6) does not apply where the passenger (a) is the holder of a certificate signed by a duly qualified medical practitioner certifying that the passenger is (i) for the period stated in the certificate, unable for medical reasons to wear a seat belt assembly, or (ii) because of size, build, or other physical characteristic, unable to wear a seat belt assembly; (b) is actually engaged in work which requires him to alight from and re-enter the vehicle at frequent intervals and the vehicle does not travel at a speed exceeding fifty kilometres per hour; or (c) is occupying and properly secured in a child seating and restraint system as prescribed under the regulations.

(8) Subject to subsection (9), no person shall operate on a highway a vehicle in which there is a passenger who is under five years of age or whose weight does not exceed eighteen kilograms, unless that passenger is occupying and properly secured in a child seating and restraint system as prescribed under the regulations.

(9) Subsection (8) does not apply where the passenger is the holder of a certificate signed by a duly qualified medical practitioner certifying that the passenger is (a) for the period stated in the certificate, unable for medical reasons to be secured in a child seating and restraint system; or (b) because of size, build, or other physical characteristic, unable to be secured in a child seating and restraint system.

(10) The Minister may, with the approval of the Lieutenant-Governor in Council make regulations (a) prescribing the requirements for child seating and restraint systems for the purposes of this Act; and (b) providing for the exemption from any of the provisions of this section of (i) any type or class of vehicle, or (ii) any class of drivers or passengers in vehicles.

(11) Every person who contravenes any provision of this section or the regulations is guilty of an offence and is liable on summary conviction to a fine of not less than twenty-five dollars and not more than five hundred dollars and in default of payment to imprisonment for a term of not less than ten days and not more than three months or to both such fine and imprisonment."

2. Section 199.1 of The Highway Traffic Act or any subsection thereof comes into force on a day to be proclaimed by the Lieutenant-Governor in Council.

APPENDIX "A"

The Child Seating and Restraint System Regulations, 1982

REGULATIONS

1. These regulations may be cited as the Child Seating and Restraint System Regulations, 1982.

2. In these regulations, "Act" means The Highway Traffic Act, Revised Statutes of Newfoundland 1970, as amended.

3. For the purposes of section 199.1 of the Act, a child seating and restraint system is one that complies with the requirements of the Motor Vehicle Safety Regulations under the Motor Vehicle Safety Act (Canada) and has been properly installed in a motor vehicle.

4. For the purposes of subsection (8) and (9) of section 199.1 of the Act, these regulations shall apply only to passengers born on or after the first day of July, 1982.

5. Subsection 8 of Section 199.1 of the Act does not apply:
   (a) where a motor vehicle
      (i) is registered in another province or jurisdiction which does not prohibit the removel or modification of a seat belt assembly in such a motor vehicle; and
      (ii) in which the seat belt assembly was, before the said motor vehicle was brought to the Province, removed or modified such that is would not be practicable or possible to install a child seating and restraint system therein;
   (b) where a motor vehicle is rented for a period of 21 days or less;
   (c) where the motor vehicle is a taxicab while it is transporting for hire a passenger within the limits of a city or municipality;
   (d) where a person comes to the Province with a motor vehicle registered in another jurisdiction and equipped with a seat belt assembly, provided however that this exemption extends for a maximum of 21 days.

6. These regulations shall come into force on the first day of July, 1982.

APPENDIX "A"

The Seat Belt Exemption Regulations, 1982

REGULATIONS

1. These regulations may be cited as the Seat Belt Exemption Regulations, 1982.

2. In these regulations "Act" means the Highway Traffic Act, Revised Statutes of Newfoundland, 1970 as amended.

3. Subsection (2) of Section 199.1 of the Act does not apply to:

   (a) a motor vehicle operated by a police force;

   (b) a motor vehicle that is registered in another province or jurisdiction, provided that if the said motor vehicle has the required seat belt assembly upon arriving in Newfoundland, then no person shall remove it, or render it partly or wholly inoperative, or modify it so as to reduce its effectiveness.

.../2

4. Subsection (3) of Section 199.1 of the Act does not apply to:

(a) a peace officer in the lawful performance of his duties, when compliance with the said subsection would endanger him or hamper the performance of his duties;

(b) a peace officer who, in the lawful performance of his duties, is transporting a person in his custody.

(c) an employee or agent of the Canada Post Office while engaged in rural mail delivery;

5. Subsection (4) of Section 199.1 of the Act does not apply to:

(a) a peace officer in the lawful performance of his duties, when compliance with the said subsection would endanger him or hamper the performace of his duties;

(b) a peace officer who, in the lawful performance of his duties, is transporting a person in his custody;

(c) a person who is in the custody of a peace officer;

.../3

(d) an employee of a driving instruction school while engaged in driving instruction; or

(e) a provincial driver examiner while engaged in driver examination.

6. Subsection (6) of section 199.1 of the Act does not apply to:

(a) a peace officer in the lawful performance of his duties, when compliance with the said subsection would endanger him or hamper the performance of his duties; or

(b) a peace officer who, in the lawful performance of his duties, is transporting a person in his custody.

7. These regulations shall come into force on the first day of July 1982.

Form 97

PROVINCE OF NOVA SCOTIA

DEPARTMENT OF TRANSPORTATION

(INTER-DEPARTMENT CORRESPONDENCE)

Halifax, NS July 15 19 83

LOCATION AND DATE

TO ACE-TM

NAME	POSITION	ADDRESS

YOUR FILE	SUBJECT	H. O. FILE
	PROPOSED CHILD OCCUPANT PROTECTION LEGISLATION FOR NOVA SCOTIA	

: Memo MIN to DM, February 1, 1983

MIN has requested that we prepare a submission to Policy Board concerning the matter of Child Occupant Protection Legislation.

Three provinces (Newfoundland, Ontario, and Saskatchewan) and at least 39 States have proclaimed child passenger protective laws which for the most part require the use of approved infant seats, child seats or seat belts by children younger than five (5) years of age. The passenger restraint legislation in the Province of British Columbia requires the use of seat belt assemblies by children between the ages of six and fifteen inclusive. The proposed occupant restraint laws for the Provinces of New Brunswick and Manitoba include the use of occupant restraints for all age groups.

From studying the existing and proposed laws, I have prepared PROPOSED CHILD OCCUPANT PROTECTION LEGISLATION AND REGULATION for Nova Scotia.

The proposed legislation and regulations are included in the attached file. The following information is also contained in the file:

1. The existing Newfoundland and Labrador Law.
2. The 1974 Nova Scotia Law.
3. The proposed New Brunswick Law.
4. The existing Ontario Law and Regulations.
5. The proposed Manitoba Law.
6. The existing Saskatchewan Law and Regulations.
7. The existing British Columbia Law.
8. The National Safety Council Update of existing United States laws.

If during the course of their review, the members of the Policy Board require additional information or explanation of any of the attachments, I will be pleased to assist them in obtaining further information from the various provinces.

- STE -

KRO'B:mir
attach.
cc: ADTE

PROVINCE OF NOVA SCOTIA

DEPARTMENT OF TRANSPORTATION

INTER-DEPARTMENT CORRESPONDENCE

255338

SEND TO: D.M. ✓ A/CE ACE TM

FROM: MINISTER — DEPT. TRANSPORTATION — DATE: Feb. 1/83.

SUBJECT: Child Restraint Legislation.

Since the deadline for submitting legislation for the 1983 session has passed, I do not propose to submit anything to Policy Board at the present time. However I think that it would be desirable for us to prepare a submission to Policy Board during the Summer months, after the House of Assembly sitting is completed, and that would provide more time for Members of the Policy Board to review the legislation without feeling that they are under the pressure of having to meet any short deadlines.

RCG/m

ACE-TM can prepare a discussion with David Bowmaster in AG's dept and proceed as they suggest

REPLY

DEPARTMENT OF TRANSPORTATION RECEIVED FEB 2 1983 538 DEPUTY MINISTER

RECEIVED FEB 3 1983 555 CHIEF ENGINEER

DEPARTMENT OF TRANSPORTATION RECEIVED FEB 4 1983 158 ASST. DIR. MOTOR VEHICLE

REPLY FROM

REPLY DATE

PROPOSED
NOVA SCOTIA CHILD OCCUPANT
PROTECTION LEGISLATION

(1) In this section

(a) "seat belt assembly" means a device or assembly composed of straps, webbing or similar material that restrains the movement of a person in order to prevent or mitigate injury to the person and includes a pelvic restraint or a pelvic restraint in combination with a torso restraint; and

(b) "child seating and restraint system" means such system as may be prescribed by regulations made under this section.

(2) Subject to subsection (3), no person shall drive on a highway a motor vehicle in which there is a passenger who is under sixteen years of age unless that passenger is wearing the complete seat belt assembly and it is properly adjusted and securely fastened, but where a seat belt assembly comprises a pelvic restraint and a torso restraint which are not joined the passenger shall be required to wear the pelvic restraint only.

(3) Subsection (2) does not apply where

(a) the passenger is the holder of a certificate signed by a legally qualified medical practitioner certifying that the passenger is for the period stated in the certificate, unable for medical reasons to wear a seat belt assembly;

(b) the peace officer is satisfied that by reason of the passenger's size, build or other physical characteristic, the person is unable to wear a seat belt assembly;

(c) the passenger is actually engaged in work which requires him to alight from and re-enter the motor vehicle at frequent intervals and the motor vehicle does not travel at a speed exceeding 40 kilometres per hour;

(d) the passenger is riding in a vehicle in which all seating positions equipped with seat belt assemblies are occupied by other persons; or,

(e) the passenger is secured in the manner prescribed by the regulations.

(4) The Governor in Council may make regulations,

(a) requiring the use of child seating and restraint systems in motor vehicles on highways and prescribing the specifications thereof;

(b) governing the use of different child seating and restraint systems based on the birth date, age, height or weight of a child, or adopting by reference manufacturer's recommendations concerning the manner in which a child is to be secured therein;

(c) adopting by reference, in part or in whole, any code, standard or specification concerning child restraint systems;

(d) exempting from any of the provisions of this section or the regulations made under this section.

(i) any type or class of motor vehicle,

(ii) any class of driver or passenger in motor vehicles.

(5) Every person who contravenes any provision of this section or the regulations is guilty of an offence and is liable on summary conviction to a fine of not less than twenty five dollars and not more than one hundred dollars.

PROPOSED REGULATIONS
FOR NOVA SCOTIA CHILD OCCUPANT PROTECTION LEGISLATION

(1) The following classes of passengers are prescribed for the purposes of Section ___, subsection 3(e) of the Act:

(a) Children weighing less than nine kilograms are classified as infants.

(b) Children weighing nine kilograms or more but less than eighteen kilograms are classified as toddlers.

(c) Children weighing eighteen kilograms or more but less than twenty-three kilograms are classified as pre-schoolers.

(2) For the purposes of Section ___, subsection 3(e) of the Act, an infant shall be secured in a rearward facing child restraint system that,

(a) conforms to the requirements of Standard 213.1 under the Motor Vehicle Safety Act (Canada);

(b) is secured by the pelvic restraint of a seat belt assembly in the manner recommended by the manufacturer of the child restraint system; and

(c) has all harnesses, straps and buckles designed to secure the child in the child restraint system properly adjusted and securely fastened.

(3) For the purpose of Section ___, subsection 3(e) of the Act a toddler shall be secured,

(a) in a child restraint system that,

(i) conforms to the requirements of the Children's Car Seats and Harness Regulations made under the Hazardous Products Act (Canada),

(ii) is secured by the pelvic restraint system of a seat belt assembly in the manner recommended by the manufacturer of the child restraint system and, where practicable, by all other anchorage straps and devices recommended by the manufacturer, and

(iii) has all harnesses, straps and buckles designed to secure the child in the child restraint system properly adjusted and securely fastened; or,

(b) if the toddler is a passenger in a vehicle not registered in Nova Scotia, or a vehicle not owned by the parent or legal guardian, the toddler may be secured by the pelvic restraint of a seat belt assembly.

(4) For the purposes of Section ___, subsection 3(e) of the Act, a pre-schooler shall be secured by

(a) the pelvic restraint of a seat belt assembly; or,

(b) a booster seat that conforms to the requirements of the Children's Car Seat and Harness Regulations made under the Hazardous Products Act (Canada) and is secured by the pelvic restraint system of a seat belt assembly in the manner recommended by the manufacturer of the booster seat.

GOVERNMENT OF NEWFOUNDLAND AND LABRADOR

OFFICE OF THE LEGISLATIVE COUNSEL

Confederation Building, St. John's A1C 5T7

October 20, 1980

Mr. A.L. White
Deputy Minister
Department of Transportation

RE: A Bill to provide for the compulsory use of seat belts

I enclose a draft of the above mentioned Bill incorporating the changes suggested by your letter of 1980 09 22.

While it is customary for the Minister sponsoring a Bill to take it to Cabinet to be approved before it is printed, you may think that is unnecessary in this case since the Cabinet Directive C54-80 which instructed this Office to prepare a draft Bill included a draft that is substantially the same as the present one.

Calvin Lake
Legislative Counsel

CL/pmcc

Encl.

Dir. Hwy Planning & Research
AWW 80.10.27

DEPARTMENT OF TRANSPORTATION RECEIVED DEC 1, 1980 HIGHWAYS ENGINEER

Draft October 20/80

Second Session, 38th General Assembly
29 Elizabeth II, 1980

BILL NO. 79

AN ACT TO AMEND THE HIGHWAY TRAFFIC ACT TO PROVIDE FOR THE COMPULSORY USE OF SEAT BELTS (NO. 2)

Received and Read the First Time

Second Reading .....

Third Reading .....

HON. R. CHARLES BRETT
Minister of Transportation

Ordered to be printed by the
Honourable House of Assembly

A BILL

AN ACT TO AMEND THE HIGHWAY TRAFFIC ACT TO PROVIDE FOR THE COMPULSORY USE OF SEAT BELTS (NO.2)

Analysis

Section:

1. S.199.1 Added. Use of seat belts required

Section:

2. Commencement

Be it enacted by the Lieutenant-Governor and House of Assembly in Legislative Session convened, as follows:

RSN 1970 c.152 as amended

1. The Highway Traffic Act is amended by adding immediately after section 199 the following:

"PART VI.1

Seat Belt Systems

Use of seat belts required

199.1(1) In this section

(a) "seat belt assembly" means a device or assembly composed of straps, webbing or similar material that restrains the movement of a person in order to prevent or mitigate injury to the person and includes a pelvic restraint or a pelvic restraint in combination with a torso restraint; and

(b) "child seating and restraint system" means such system as may be prescribed by regulations made under this section.

(2) No person shall operate on a highway a vehicle in which a seat belt assembly required under the provisions of the Motor Vehicle Safety Act (Canada) at

the time that the vehicle was manufactured or imported into Canada has been removed, rendered partly or wholly inoperative, or modified so as to reduce its effectiveness.

(3) Subject to subsection (5), every person who operates on a highway a vehicle in which a seat belt assembly is provided for the driver shall wear the complete seat belt assembly in a properly adjusted and securely fastened manner but, where a seat belt assembly comprises a pelvic restraint and a torso restraint which are not joined, the driver shall be required to wear the pelvic restraint only.

(4) Subject to subsection (5), every person who is a passenger on a highway in a vehicle in which a seat belt assembly is provided for the seating position occupied by the passenger shall wear the complete seat belt assembly in a properly adjusted and securely fastened manner but, where a seat belt assembly comprises a pelvic restraint and a torso restraint which are not joined, the passenger shall be required to wear the pelvic restraint only.

(5) Subsections (3) and (4) do not apply to a person

(a) driving a vehicle in reverse;

(b) who holds a certificate signed by a duly qualified medical practitioner certifying that the person is

(i) for the period stated in the certificate, unable for medical reasons to wear a seat belt assembly, or

(ii) because of size, build, or other physical characteristic, unable to wear a seat belt assembly;

(c) who is actually engaged in work which requires the person to alight from and re-enter a vehicle at frequent intervals and who, while engaged in the work, does not drive or travel in that vehicle at a speed exceeding fifty kilometres per hour; or

(d) under the age of sixteen years.

(6) Subject to subsection (7), no person shall operate on a highway a vehicle in which there is a passenger who has attained the age of five years or whose weight exceeds eighteen kilograms and who is under sixteen years of age and occupies a seating position for which a seat belt assembly has been provided unless that passenger is wearing the complete seat belt assembly in a properly adjusted and securely fastened manner.

(7) Subsection (6) does not apply where the passenger

(a) is the holder of a certificate signed by a duly qualified medical practitioner certifying that the passenger is

(i) for the period stated in the certificate, unable for medical reasons to wear a seat belt assembly, or

(ii) because of size, build or other physical characteristic, unable to wear a seat belt assembly;

(b) is actually engaged in work which requires him to alight from and re-enter the vehicle at frequent intervals and the vehicle does not travel at a speed exceeding fifty kilometres per hour; or

(c) is occupying and properly secured in a child seating and restraint system as prescribed under the regulations.

(8) Subject to subsection (9), no person shall operate on a highway a vehicle in which there is a passenger who is under five years of age or whose weight does not exceed eighteen kilograms, unless that passenger is occupying and properly secured in a child seating and restraint system as prescribed under the regulations.

(9) Subsection (8) does not apply where the passenger is the holder of a certificate signed by a duly qualified medical practitioner certifying that the passenger is

(a) for the period stated in the certificate, unable for medical reasons to be secured in a child seating and restraint system; or

(b) because of size, build or other physical characteristic, unable to be secured in a child seating and restraint system.

(10) The Minister may, with the approval of the Lieutenant-Governor in Council, make regulations

(a) prescribing the requirements for child seating and restraint systems for the purposes of this Act;

(b) providing for the exemption from any of the provisions of this section of

(i) any type or class of vehicle,

(ii) any class of drivers or passengers in vehicles.

(11) Every person who contravenes any provision of this section or the regulations is guilty of an offence and is liable on summary conviction to a fine of not less than twenty-five dollars and not more than five hundred dollars and in default of payment to imprisonment for a term of not less than ten days and not more than three months or to both such fine and imprisonment.

(12) A person who is convicted of a contravention of subsection (8) shall, within seven days after such conviction, produce at a police station proof of purchase of a child seating and restraint system.

(13) Every person who fails to produce the proof required under subsection (12) is guilty of an offence and is liable on summary conviction to a fine not exceeding five dollars for every day or part thereof during which such offence occurs or continues."

Commencement

2. This Act comes into force on a day to be proclaimed by the Lieutenant-Governor in Council.

person to so ride upon any such vehicle. (1970, c. 53, s. 13) (Effective August 1, 1970)

Clinging to moving vehicles prohibited.

(2) It shall be an offence for any person travelling upon a bicycle, motorcycle, coaster, sled, roller skates, skis or any toy vehicle to cling to or attach himself or his vehicle to any other moving vehicle or street car upon a highway or for the driver of any such moving vehicle or street car to allow or permit any such person to cling to or attach himself or his vehicle to said moving vehicle or street car. (R.S., c. 184, s. 143.)

Headgear.

153 (1) No person shall operate or ride as a passenger on a motorcycle or motor scooter on a highway unless he is wearing adequate protective headgear of a kind prescribed by regulation of the Governor in Council.

(1A) Regulations made under subsection (1) may adopt by reference or otherwise standards or specifications established or approved by the Canadian Standards Association or other testing organization with or without modifications or variations or may require that any headgear conform to the standards or specifications established or approved by the Canadian Standards Association or other testing organization or bear the approval of the Canadian Standards Association or other testing organization. (1970-71, c. 51, s. 23) (Effective May 15, 1971).

Restrictions in riding bicycles.

154 (1) The rider of a bicycle shall not allow the same to proceed in a highway by inertia momentum, with his feet removed from the pedals, nor shall such rider remove both hands from the handle bars while riding the bicycle nor practice any trick or fancy riding on a highway.

Bicycles on sidewalks.

(2) No person shall ride a bicycle, tricycle, or similar machine on a sidewalk; provided, nothing in this Section shall be deemed or construed to prevent the use of velocipedes or similar machines by children on a sidewalk in a public square, park, city or town.

Bicycles to travel to right of highway in single file.

(3) No person shall ride a bicycle on a highway except as near as practicable to the extreme right of the main travelled portion of the highway and no person shall ride a bicycle abreast of or generally parallel to another bicycle in motion on the highway except for the purpose of passing any such other bicycle. (R.S., c. 184, s. 144.)

Roller skates and similar devices restricted.

155 It shall be an offence for a person upon roller skates, to go on a roadway except while crossing on a crosswalk. (R.S., c. 184, s. 145.)

Throwing objects at vehicles.

156 (1) No person shall throw any object at a motor vehicle or at a person in a motor vehicle or on a highway which may cause injury to such vehicle or to any person therein.

Glass, nails, etc., on the highway.

(2) No person shall throw, deposit, or knowingly leave on a highway any glass, nails, tacks, scraps of metal, or other materials that are liable to injure tires of motor vehicles.

Littering highway prohibited.

(3) No person shall throw or otherwise deposit from any vehicle on the highway any litter, refuse, garbage, rubbish or other matter. (R.S., c. 184, s. 146;) (1960, c. 41, s. 5.)

EQUIPMENT

Lighting equipment, when required.

157 (1) Except as provided in this Section, every vehicle upon a highway within this Province during the period from a half hour after sunset to a half hour before sunrise and at any other time when visibility is

so limited by fog, rain, snow or the atmospheric condition or by insufficiency of light as to render not clearly discernible any person on the highway at a distance of one thousand feet ahead shall be equipped with lighted head lamps and lighted rear lamps as in this Section respectively required for different classes of vehicle and subject to exemption with reference to lights on parked vehicles as declared in subsection (10). (1972, c. 45, s. 8) (Effective June 1, 1972).

Head lamps on motor vehicles.

(2) Every motor vehicle other than a motorcycle, roadroller, road machinery, or farm tractor shall be equipped with not fewer than two head lamps, at the front of and on opposite sides of the motor vehicle which head lamps shall comply with the requirements and limitations set forth in Section 160 or Section 161 or any regulations that may be made under Section 178.

Head lamps on motorcycles.

(3) Every motorcycle shall be equipped with at least one and not more than two head lamps which shall comply with the requirements and limitations set forth in Section 160 or Section 161 or any regulations that may be made under Section 178.

Tail lights.

(4) Every motor vehicle and every trailer or semi-trailer that is being drawn at the end of a train of vehicles shall be equipped at the rear with

(a) a lamp that exhibits a red light plainly visible under normal atmospheric conditions from a distance of five hundred feet to the rear of the vehicle, and that is so constructed and placed that the number plate carried on the rear of the vehicle is, under the same conditions, so illuminated by a white light that it can be read from a distance of fifty feet to the rear of the vehicle; or

(b) a lamp that exhibits a red light plainly visible under normal atmospheric conditions from a distance of five hundred feet to the rear of the vehicle and a lamp that so illuminates with a white light the number plate carried on the rear of the vehicle that under the same conditions the number plate can be read from a distance of fifty feet to the rear of the vehicle.

Clearance lamps and reflectors.

(5) Every vehicle, other than a standard passenger motor vehicle, roadroller, road machinery or farm tractor, having a width at any part in excess of eighty inches shall carry two clearance lamps on the left side of the vehicle, one located at the front and displaying a white or yellow light visible under normal atmospheric conditions, from a distance of five hundred feet to the front of the vehicle, and the other located at the rear of the vehicle and displaying a red light visible under like conditions from a distance of five hundred feet to the rear of the vehicle. A vehicle requiring clearance lamps hereunder may in lieu of such clearance lights be equipped with adequate reflectors conforming as to color and marginal location to the requirements for clearance lights, and of a type which has been approved by the Department. No such reflector shall be deemed adequate unless it is so designed, located as to height and maintained as to be visible for at least five hundred feet when opposed by a motor vehicle displaying lawful undimmed headlights at night on an unlighted highway.

Lamps on Bicycles.

(6) Every bicycle shall be equipped with a lighted lamp on the front thereof visible under normal atmospheric conditions from a distance of at least three hundred feet in front of the bicycle and shall also be equipped with a reflex mirror or lamp on the rear exhibiting a red light visible under like conditions from a distance of at least two hundred feet to the rear of such bicycle.

Lamps on other vehicles.

(7) All vehicles not heretofore in this Section required to be equipped with specified lighted lamps shall carry one or more lighted lamps or lanterns displaying a white light visible under normal atmospheric conditions from a distance of not less than five hundred feet to the front and rear of the vehicle or displaying white lights to the front and a red light to the rear, each visible under like conditions from a distance of not less than five hundred feet from the vehicle.

Reflectors.

(8) The Department may by regulation permit a reflector of a type approved by the Minister to be substituted for the lighted lamps required by subsection (7).

Reflectors on vehicles carrying explosives, etc.

(9) The Department may by regulations permit a reflector of a type approved by the Minister to be substituted for the lighted lamps required by this Section on any vehicle engaged in transporting inflammable or explosive loads provided that the driver of the vehicle shall at all times mentioned in subsection (1) carry a special permit issued by the Registrar, setting forth the conditions under which the vehicle may be operated with reflectors in place of lights.

Lamps on parked vehicles.

(10) Whenever a vehicle is parked or stopped upon a highway whether attended or unattended during the times mentioned in subsection (1), there shall be displayed upon the vehicle one or more lamps one of which shall be on the roadway side and project a white, amber or yellow light visible under normal atmospheric conditions from a distance of five hundred feet to the front of the vehicle and one of which lamps shall project a red light visible under like conditions from a distance of five hundred feet to the rear, except that no lights need be displayed upon a vehicle when parked upon a highway where there is sufficient light to reveal any person within a distance of two hundred feet upon the highway.

Side marker lamps or reflectors.

(11) A vehicle exceeding twenty-four feet in length shall display a white marker light of not to exceed four candle-power, or a white reflector, meeting the requirements as to visibility of subsection (4), on both the right and left sides, and any combination of vehicles exceeding twenty feet in length shall display on both the right and left sides such marker lights or reflectors at intervals of not to exceed twenty feet. Other vehicles may but are not required to display such marker lights or reflectors. (R.S., c. 184, s. 147;) (1957, c. 34, s. 9;) (1960, c. 41, s. 6;) (1963, c. 31, s. 6;) (1967, c. 57, s. 9.)

(12) Where a motor vehicle is equipped with restraint equipment of the type required by the Motor Vehicle Safety Act (Canada), the operator and passengers in such moving vehicle shall use the restraint equipment in the manner for which it was designed. (not proclaimed)

(13) The Governor in Council may make regulations exempting from the requirements of subsection (12) such operators, passengers and vehicles and such classes of operators, passengers and vehicles as in its discretion it deems fit. (not proclaimed)

(14) The use or non-use of restraint equipment by operators or passengers shall not be evidence of negligence in any civil action. (not proclaimed)

Regulations respecting lighting equipment.

158 The Governor in Council may make regulations prescribing or regulating the number, color, type, strength, location, direction, focus, use and all other matters with reference to clearance lamps, reflectors, side marker lamps and other lighting equipment to be fitted, carried or

REGULATIONS RESPECTING RESTRAINT EQUIPMENT ON MOTOR VEHICLES MADE PURSUANT TO SECTION 157 AND SECTION 178 OF THE MOTOR VEHICLE ACT

1 These Regulations may be cited as the "seat belt regulations".

2 In these Regulations, "restraint equipment" means restraint equipment of the type required by the Motor Vehicle Safety Act (Canada)

3 Where a motor vehicle was equipped with restraint equipment when the motor vehicle was manufactured, no person shall operate the motor vehicle unless it is equipped with restraint equipment.

4 In a prosecution for a violation of Section 3 of these Regulations or of Section 157(12) of the Motor Vehicle Act, a certificate purporting to be signed by the Registrar of Motor Vehicles, and bearing the seal of the Department, that restraint equipment was installed in a motor vehicle as standard equipment at the time of the manufacture of the motor vehicle, is admissible in evidence and is prima facie proof of its contents, without proof of the signature or seal or of the official character of the person who appears to have signed the certificate.

5 The following persons are exempted from the requirements of Section 157(12) of the Motor Vehicle Act:

(a) a person who is occupied or employed in the pick-up and delivery of goods or who provides a service on a door-to-door basis; but this exemption only applies during the course of such occupation or employment;

(b) a person whose occupation or employment requires him to stop and start a motor vehicle, or enter and leave a motor vehicle at frequent intervals; but this exemption only applies during the course of such occupation or employment;

(c) a person who by reason of his body size cannot be secured safely by restraint equipment;

(d) a person who according to the certificate of a duly qualified physician, should not be secured by restraint equipment because of a pregnancy or because of physical impairment, disability, abnormality or other sound medical reason provided that the certificate of the physician is produced for inspection at the request of a peace officer;

(e) a person who is an operator or passenger in a motor vehicle being driven upon a highway or portion thereof where the traffic authority has indicated a maximum rate of speed of 30 miles per hour;

(f) a person who is riding in a motor vehicle in which all seating positions equipped with restraint equipment are occupied by other persons;

6 These Regulations come into force on the day of

15 ***The said Act is amended by adding immediately after section 200 thereof the following section:***

200.1(1) In this section, "seat belt assembly" means a device or assembly composed of straps, webbing or similar material that restrains the movement of a person in order to prevent or mitigate injury to the person and includes a pelvic restraint or an upper torso restraint or both of them.

200.1(2) No person shall drive on a highway a motor vehicle in which a seat belt assembly required under the provisions of the *Motor Vehicle Safety Act*, chapter 26 (1st supp.) of the Revised Statutes of Canada, 1970, at the time that the vehicle was manufactured or imported into Canada has been removed, rendered partly or

15 ***Cette loi est modifiée par l'insertion, après l'article 200, de l'article suivant:***

200.1(1) Dans le présent article, «ceinture de sécurité» désigne un dispositif ou ensemble composé de courroies, sangles ou pièces d'équipement similaires, qui restreint les mouvements d'une personne afin de la protéger contre les blessures corporelles ou de les atténuer; l'expression s'entend également d'une ceinture sous-abdominale ou d'une ceinture-baudrier ou des deux.

200.1(2) Nul ne peut conduire sur une route un véhicule à moteur dans lequel une ceinture de sécurité qui devait l'équiper, conformément aux dispositions de la *Loi sur la sécurité des véhicules automobiles*, chapitre 26 (1re supp.) des Statuts revisés du Canada de 1970, au moment où le véhicule a été fabriqué ou importé au Canada, a été

wholly inoperative or modified so as to reduce its effectiveness.

200.1(3) Subject to subsection (5), every person who drives on a highway a motor vehicle in which a seat belt assembly is provided for the driver shall wear the complete seat belt assembly in a properly adjusted and securely fastened manner.

200.1(4) Subject to subsection (5), every person, other than a person under the age of sixteen, who is a passenger in a motor vehicle being driven on a highway and who occupies a seating position for which a seat belt assembly is provided shall wear the complete seat belt assembly in a properly adjusted and securely fastened manner.

200.1(5) Subsections (3) and (4) do not apply to a person

(a) driving a motor vehicle in reverse;

(b) who holds a certificate signed by a medical practitioner certifying that the person

(i) for the period stated in the certificate is unable for medical reasons to wear a seat belt assembly, or

(ii) because of his physical characteristics is unable to wear a seat belt assembly; or

(c) who is actually engaged in work which requires him to alight from and re-enter a motor vehicle at frequent intervals and, while engaged in such work, does not drive or travel in that vehicle at a speed exceeding forty kilometres per hour.

200.1(6) Subject to subsection (7), no person shall drive on a highway a motor vehicle in which there is a passenger who is under sixteen years of age and occupies a seating position for which a seat belt assembly is provided unless that passenger

enlevée, rendue totalement ou partiellement inopérante ou modifiée de façon à réduire son efficacité.

200.1(3) Sous réserve du paragraphe (5), quiconque conduit sur une route un véhicule à moteur équipé d'une ceinture de sécurité pour le conducteur, doit l'utiliser au complet en la réglant proprement et en l'attachant de façon sûre.

200.1(4) Sous réserve du paragraphe (5), toute personne âgée de seize ans et plus, qui est un passager d'un véhicule à moteur circulant sur une route et qui occupe une place assise pourvue d'une ceinture de sécurité, doit l'utiliser au complet en la réglant proprement et en l'attachant de façon sûre.

200.1(5) Les paragraphes (3) et (4) ne s'appliquent pas à quiconque

a) conduit un véhicule à moteur en marche arrière;

b) est porteur d'un certificat signé par un médecin attestant qu'il ne peut utiliser une ceinture de sécurité en raison

(i) de son état de santé, durant la période mentionnée dans le certificat, ou

(ii) de ses particularités physiques; ou

c) exécute effectivement un travail qui l'oblige à descendre d'un véhicule à moteur et à y remonter à intervalles fréquents pour autant que, durant ce travail, la vitesse du véhicule qu'il conduit ou à bord duquel il a pris place comme passager ne dépasse pas quarante kilomètres à l'heure.

200.1(6) Sous réserve du paragraphe (7), nul ne peut conduire sur une route un véhicule à moteur dans lequel se trouve un passager âgé de moins de seize ans, occupant une place assise pourvue d'une ceinture de sécurité, sauf si ce passager, selon le cas,

(a) is wearing the complete seat belt assembly in a properly adjusted and securely fastened manner, or

(b) is occupying and is properly secured in a child seating and restraint system prescribed by regulation,

as the case may be.

200.1(7) Subsection (6) does not apply where the passenger

(a) is the holder of a certificate signed by a medical practitioner certifying that the passenger

(i) for the period stated in the certificate is unable for medical reasons to wear a seat belt assembly, or

(ii) because of his physical characteristics is unable to wear a seat belt assembly; or

(b) is actually engaged in work which requires him to alight from and re-enter the motor vehicle at frequent intervals and, while the passenger is engaged in such work, the motor vehicle does not travel at a speed exceeding forty kilometres per hour.

200.1(8) The Lieutenant-Governor in Council may make regulations

(a) requiring the use of child seating and restraint systems in motor vehicles on highways and prescribing the specifications thereof;

(b) providing for the exemption from any of the provisions of this section of

(i) any type or class of motor vehicles, and

(ii) any class of drivers or passengers in motor vehicles.

a) utilise la ceinture de sécurité au complet en la réglant proprement et en l'attachant de façon sûre, ou

b) occupe un système de siège et de harnais pour enfant prescrit par règlement et y est convenablement attaché.

200.1(7) Le paragraphe (6) ne s'applique pas lorsque le passager

a) est porteur d'un certificat signé par un médecin attestant qu'il ne peut utiliser une ceinture de sécurité en raison

(i) de son état de santé durant la période mentionnée dans le certificat, ou

(ii) de ses particularités physiques; ou

b) exécute effectivement un travail qui l'oblige à descendre du véhicule à moteur et à y remonter à intervalles fréquents pour autant que, pendant qu'il effectue ce travail, la vitesse du véhicule à moteur ne dépasse pas quarante kilomètres à l'heure.

200.1(8) Le lieutenant-gouverneur en conseil peut établir des règlements

a) exigeant l'utilisation des systèmes de sièges et de harnais pour enfants dans les véhicules à moteur circulant sur les routes et prescrivant leurs caractéristiques;

b) dispensant de l'application de tout ou partie des dispositions du présent article

(i) tout genre ou classe de véhicules à moteur, et

(ii) toute classe de conducteurs ou de passagers de véhicules à moteur.

Penalty

(6) Every person who contravenes any of the provisions of subsection (3) is guilty of an offence and on conviction is liable to a fine of not less than $100 and not more than $500. R.S.O. 1980, c. 198, s. 87.

Motorcycle riders, etc., to wear helmets

88.—(1) No person shall ride on or operate a motorcycle or motor assisted bicycle on a highway unless he is wearing a helmet that complies with the regulations.

Regulations

(2) The Lieutenant Governor in Council may make regulations,

(a) prescribing the standards and specifications of helmets referred to in subsection (1);

(b) providing for and requiring the identification and marking of such helmets.

Codes

(3) Any regulation may adopt by reference in whole or in part, with such changes as the Lieutenant Governor in Council considers necessary, any code, and may require compliance with any code that is so adopted. R.S.O. 1980, c. 198, s. 88.

Sale of new vehicles that do not conform to [illegible] prescribed

89.—(1) No person who deals in motor vehicles, trailers or conversion units shall sell or offer to sell a new motor vehicle, trailer or conversion unit that does not conform to the standards required under the *Motor Vehicle Safety Act* (Canada) or that does not bear the National Safety Mark referred to therein.

R.S.C. 1970, c. 26 (1st Supp.)

Sale of motor assisted bicycles

(2) No person who deals in motor assisted bicycles shall sell a new motor assisted bicycle unless on the delivery of the vehicle to the purchaser, the seller gives to the purchaser a document in a form approved by the Ministry certifying that the vehicle complies with the definition of a motor assisted bicycle.

Penalty

(3) Every person who contravenes any provision of subsection (1) is guilty of an offence and on conviction is liable to a fine of not less than $100 and not more than $500. R.S.O. 1980, c. 198, s. 89.

Definition

90.—(1) In this section, "seat belt assembly" means a device or assembly composed of straps, webbing or similar material that restrains the movement of a person in order to prevent or mitigate injury to the person and

includes a pelvic restraint or an upper torso restraint or both of them. R.S.O. 1980, c. 198, s. 90 (1).

Seat belt assembly

(2) No person shall drive on a highway a motor vehicle in which a seat belt assembly required under the provisions of the *Motor Vehicle Safety Act* (Canada) at the time that the vehicle was manufactured or imported into Canada has been removed, rendered partly or wholly inoperative, modified so as to reduce its effectiveness or is not operating properly through lack of maintenance. 1982, c. 28, s. 3 (1).

R.S.C. 1970, c. 26, 1st Supp.

Use of seat belt assembly by driver

(3) Subject to subsection (5), every person who drives on a highway a motor vehicle in which a seat belt assembly is provided for the driver shall wear the complete seat belt assembly in a properly adjusted and securely fastened manner.

Use of seat belt assembly by passenger

(4) Subject to subsection (5), every person who is a passenger on a highway in a motor vehicle in which a seat belt assembly is provided for the seating position occupied by the passenger shall wear the complete seat belt assembly in a properly adjusted and securely fastened manner.

Exemption

(5) Subsections (3) and (4) do not apply to a person,

(a) driving a motor vehicle in reverse;

(b) who holds a certificate signed by a legally qualified medical practitioner certifying that the person is,

(i) for the period stated in the certificate, unable for medical reasons to wear a seat belt assembly, or

(ii) because of the person's size, build or other physical characteristic, unable to wear a seat belt assembly;

(c) who is actually engaged in work which requires him to alight from and re-enter a motor vehicle at frequent intervals and who, while engaged in such work, does not drive or travel in that vehicle at a speed exceeding 40 kilometres per hour; or

(d) under the age of sixteen years. R.S.O. 1980, c. 198, s. 90 (3-5).

Driver to ensure passenger uses seat belt assembly

(6) No person shall drive on a highway a motor vehicle in which there is a passenger who is under sixteen years of age and occupies a seating position for which a seat belt assembly has been provided unless that passenger is wearing the complete seat belt assembly and it is properly adjusted and securely fastened. R.S.O. 1980, c. 198, s. 90 (6); 1982, c. 28, s. 3 (2).

Exception

(7) Subsection (6) does not apply where the passenger,

(*a*) is the holder of a certificate signed by a legally qualified medical practitioner certifying that the passenger is,

(i) for the period stated in the certificate, unable for medical reasons to wear a seat belt assembly, or

(ii) because of the passenger's size, build or other physical characteristic, unable to wear a seat belt assembly;

(*b*) is actually engaged in work which requires him to alight from and re-enter the motor vehicle at frequent intervals and the motor vehicle does not travel at a speed exceeding 40 kilometres per hour; or

(*c*) is secured in the manner prescribed by the regulations. R.S.O. 1980, c. 198, s. 90 (7); 1982, c. 28, s. 3 (3).

Regulations

(8) The Lieutenant Governor in Council may make regulations,

(*a*) requiring the use of child seating and restraint systems in motor vehicles on highways and prescribing the specifications thereof;

(*b*) governing the use of different child seating and restraint systems based on the birth date, age, height or weight of a child or the relationship of a child to the driver or owner of the motor vehicle and prescribing, or adopting by reference manufacturer's recommendations concerning, the manner in which a child is to be secured therein;

(*c*) prescribing classes of motor vehicles, drivers and passengers;

(d) adopting by reference, in part or in whole, any code, standard or specification concerning child restraint systems;

(e) exempting from any of the provisions of this section or the regulations made under this section,

(i) any class of motor vehicle,

(ii) any class of driver or passenger, or

(iii) drivers carrying any prescribed class of passenger,

and prescribing conditions for any such exemption. R.S.O. 1980, c. 198, s. 90 (8); 1982, c. 28, s. 3 (4).

PART VI

LOAD AND DIMENSIONS

Interpretation

91. In this Part,

(a) "over-dimensional farm vehicle" means a farm tractor, self-propelled implement of husbandry, implement of husbandry, or any combination of them, having a weight, width, length or height in excess of the limits provided in this Part or Part VII;

(b) "semi-trailer" means a trailer designed to be operated with the forward part of its body or chassis resting upon the body or chassis of a towing vehicle. R.S.O. 1980, c. 198, s. 91.

Width of vehicle

92.—(1) Subject to section 93, no vehicle including load or contents shall have a greater width than 2.6 metres while on a highway except,

(a) traction engines, which may have a total width not exceeding 2.8 metres; or

(b) motor vehicles and road-building machines, operated by or on behalf of a municipality or other authority having jurisdiction and control of a highway, where such vehicles are engaged in road maintenance, including the removal of snow from a highway.

REGULATION 485

under the Highway Traffic Act

SEAT BELT ASSEMBLIES

1. Correctional Service of Canada vehicles that are modified to facilitate the transportation of persons held in custody and police department vehicles are exempt from the requirement that,

(a) upper torso restraints;

(b) seat belt assemblies in the centre front seat seating position; and

(c) seat belt assemblies in the rear seat seating positions,

not be removed, rendered partly or wholly inoperative or modified so as to reduce their effectiveness. R.R.O. 1980, Reg. 485, s. 1.

2. A police officer, constable or peace officer who in the lawful performance of his duty is transporting a person in his custody is exempt from subsections 90 (3), (4) and (6) of the Act. R.R.O. 1980, Reg. 485, s. 2.

3. A person who is in the custody of a police officer, constable or peace officer is exempt from subsection 90 of the Act. R.R.O. 1980, Reg. 485, s. 3.

4. An employee or agent of the Canada Post Office while engaged in rural mail delivery is exempt from subsection 90 (3) of the Act. R.R.O. 1980, Reg. 485, s. 4.

5.—(1) In this Regulation "taxicab" means,

(a) a motor vehicle licensed as a cab by a municipality; or

(b) a motor vehicle designed for carrying less than ten passengers and operated under the authority of an operating licence issued under the *Public Vehicles Act*.

(2) Taxicabs are exempt from the requirement that,

(a) upper torso restraints for drivers' seating positions; and

(b) seat belt assemblies in the centre front seat seating positions,

not be removed, rendered partly or wholly inoperative or modified so as to reduce their effectiveness.

(3) The driver of a taxicab while transporting for hire a passenger is exempt from subsection 90 (3) of the Act. R.R.O. 1980, Reg. 485, s. 5.

6.—(1) The following classes of passengers are prescribed for the purposes of clause 90 (7) (*c*) of the Act:

1. Children weighing less than nine kilograms are classified as infants.

2. Children weighing nine kilograms or more but less than eighteen kilograms are classified as toddlers.

3. Children weighing eighteen kilograms or more but less than twenty-three kilograms are classified as pre-schoolers.

(2) For the purposes of clause 90 (7) (*c*) of the Act, an infant born after the 31st day of October, 1982, shall be secured in a rearward-facing child restraint system that,

(a) conforms to the requirements of Standard 213.1 under the *Motor Vehicle Safety Act* (Canada);

(b) is secured by the pelvic restraint of a seat belt assembly in the manner recommended by the manufacturer of the child restraint system; and

(c) has all harnesses, straps and buckles designed to secure the child in the child restraint system properly adjusted and securely fastened.

(3) For the purposes of clause 90 (7) (*c*) of the Act and subject to subsection (4), a toddler born after the 31st day of October, 1982, shall be secured,

(a) in a child restraint system that,

(i) conforms to the requirements of the Children's Car Seats and Harness Regulations made under the *Hazardous Products Act* (Canada),

(ii) is secured by the pelvic restraint system of a seat belt assembly in the manner recommended by the manufacturer of the child restraint system and, where practicable, by all other anchorage straps and devices recommended by the manufacturer, and

(iii) has all harnesses, straps and buckles designed to secure the child in the child restraint system properly adjusted and securely fastened; or

(b) by the pelvic restraint of a seat belt assembly.

(4) A toddler born after the 31st day of October, 1982, who is being transported in a motor vehicle that is owned, leased or regularly used by his parent or legal guardian, shall be secured in a child restraint system that complies with the requirements set out in clause (3) (a).

(5) For the purposes of clause 90 (7) (c) of the Act, a preschooler shall be secured by the pelvic restraint of a seat belt assembly.

(6) The driver of,

(a) a taxicab, bus or public vehicle, while transporting a passenger for hire; or

(b) a motor vehicle that is leased on a short-term basis or registered in another jurisdiction,

is exempt from subsection 90 (6) of the Act in respect of a passenger who is an infant or toddler.

(7) The driver of a motor vehicle is exempt from subsection 90 (6) of the Act in respect of a passenger born before the 1st day of November, 1982 who is an infant or toddler. O. Reg. 545/82, s. 1.

7. Where a motor vehicle that was manufactured in or imported into Canada prior to the 1st day of January, 1974 is driven on a highway,

(a) the driver and passengers are exempt from the requirement to wear the upper torso restraint component of a seat belt assembly, and

(b) the driver is exempt from the provisions of subsection 90 (6) of the Act with respect to the requirement that passengers wear upper torso restraint components. R.R.O. 1980, Reg. 485, s. 7.

Language Certificate:
I hereby certify that this Bill was printed in the English language only when copies were first distributed to the members of the House.
Dated this 26th day of April, 1983.
W. H. REMNANT, Clerk of the House.

CHAPTER 51

Bill 60

AN ACT TO AMEND THE HIGHWAY TRAFFIC ACT (2)

(Assented to August 18, 1983)

HER MAJESTY, by and with the advice and consent of the Legislative Assembly of Manitoba, enacts as follows:

Secs. 172.2 and 172.3 added.

1 The Highway Traffic Act, being chapter H60 of the Revised Statutes is amended by adding thereto, immediately after section 172.1, the following sections:

Seat belt assembly.

172.2(1) In this Act, "seat belt assembly" means a device or assembly, securely fastened to the motor vehicle, composed of straps, webbing or similar material and includes a pelvic restraint or an upper torso restraint, or both of them, capable of restraining the movement of a person in order to prevent or mitigate injury to the person.

Condition of seat belt.

172.2(2) No person shall drive, or permit the operation of, a motor vehicle on a highway in which a seat belt assembly required by the regulations made under the Motor Vehicle Safety Act (Canada) at the time that the vehicle was manufactured or imported into Canada, has been removed, modified or rendered partly or wholly inoperative so as to reduce its effectiveness.

Seat belt required by driver.

172.2(3) Subject to subsection (5), every person who drives on a highway a motor vehicle in which a seat belt assembly is provided for the driver shall wear a complete seat belt assembly in a properly adjusted and securely fastened manner; but where a seat belt assembly consists of a separate pelvic and torso restraint the driver may wear the pelvic restraint only.

Seat belt required by passenger.

172.2(4) Subject to subsection (5), every person who is a passenger in a motor vehicle while it is being driven on a highway in which a seat belt assembly is provided for seating positions occupied by the passenger shall wear the complete seat belt assembly in a properly adjusted and securely fastened manner; but where a seat belt assembly consists of a separate pelvic and a torso restraint the person may wear the pelvic restraint only.

Wearing seat belts not required.

172.2(5) Subsections (3) and (4) do not apply to a person

(a) driving a motor vehicle in reverse;

(b) who holds a certificate signed by a qualified medical practitioner certifying that the person is during the period stated in the certificate, unable for medical reasons to wear a seat belt assembly and on request made by a peace officer produces the certificate;

(c) where the peace officer is satisfied that by reason of the person's size, build or other physical characteristics, the person is unable to wear a seat belt assembly;

(d) while he is engaged in work which requires him to alight from and re-enter the motor vehicle at frequent intervals and who while engaged in the work does not drive at a speed exceeding 40 kilometres per hour;

(e) who is a peace officer and the use of a seat belt assembly would obstruct or hinder him in the performance of his duties;

(f) who is a driving instructor of a driving instruction school or any other person while engaged in driving instruction;

(g) who is a provincial driver examiner while engaged in driver examination; or

(h) who has not attained the age of 5 years.

Age restriction.

172.2(6) Subject to subsection (7), no person shall drive on a highway a motor vehicle in which there is a passenger

(a) who has attained the age of at least 5 years but has not yet attained the age of 18 years; or

(b) who is under the age of 5 years but whose weight exceeds 50 pounds;

and who occupies a seating position for which a seat belt assembly is provided, unless that passenger is wearing the complete seat belt assembly in a properly adjusted and securely fastened manner; but where the seat belt assembly consists of a separate pelvic and torso restraint, the passenger may wear the pelvic restraint only.

Medical or physical restrictions.

172.2(7) Subsection (6) does not apply where the passenger

(a) holds a certificate signed by a qualified medical practitioner certifying that the person is, during the period stated in the certificate, unable for medical reasons to wear a seat belt assembly, and on request made by a peace officer produces the certificate;

(b) is, to the satisfaction of a peace officer, of such size or build or possesses such other physical characteristics that he is unable to wear a seat belt assembly;

(c) is engaged in work which requires him to alight from and re-enter the motor vehicle at frequent intervals and the motor vehicle is not being driven at a speed exceeding 40 kilometres per hour; or

(d) is in the care or custody of a peace officer.

Driving while on duty.

172.2(8) Subsections (3), (4) and (6) do not apply to

(a) a peace officer who in the lawful performance of his duty, is transporting a person in his care or custody;

(b) a driver where he is transporting a passenger for hire in a taxicab or livery; or

(c) a medical attendant where he is transporting a patient in an ambulance.

Child restraints required.
172.2(9) No person shall operate, or permit the operation of, a motor vehicle on a highway unless every passenger in the vehicle who has not yet attained the age of 5 years and who is under 50 pounds in weight is properly secured in a restraining device of a kind prescribed in the regulations and the device is properly secured to the motor vehicle.

Requirement for seat belts.
172.2(10) No manufacturer of motor vehicles and no dealer, and no agent or employee of any manufacturer or dealer, and no person shall sell a motor vehicle that is, or is advertised to be, a motor vehicle of the model or make of the year 1971 or of any subsequent year, unless the motor vehicle is equipped at the time of sale as required by The Motor Vehicle Safety Act (Canada)

(a) with at least two seat belts in the front seat; and

(b) where there is a back seat in the motor vehicle, with at least two seat belts in the back seat;

installed by the manufacturer or dealer of the motor vehicle.

Prohibition of removal of seat belt.
172.2(11) No person shall remove from a motor vehicle a seat belt, or any part thereof, that was installed by the manufacturer except to replace broken or worn seat belts or parts thereof.

Offence and penalty.
172.2(12) Every person who contravenes subsections (2), (3), (4), (6), (9), (10) or (11) is guilty of an offence and liable, on summary conviction to a fine of not less than $20.00 and not more than $100.00.

Minors not subject to penalty.
172.2(13) Subsection (12) does not apply to a person who contravenes subsection (4) if that person at the time of the contravention is over 5 years of age but under 18 years of age.

Regulations.

172.2(14) The Lieutenant Governor in Council may make regulations

(a) prescribing the standards for child restraining devices; and

(b) providing for exemption from any provision of this section in respect of any type or class of motor vehicle, or any class of drivers, or passengers in motor vehicles.

Helmets required.

172.3(1) No person shall ride on or operate a motorcycle, moped or motor assisted bicycle on a highway unless he is wearing on his head a properly adjusted and securely fastened helmet in compliance with the requirements of the regulation.

Where helmets not required.

172.3(2) Subsection (1) does not apply to the operator or passenger of a motorcycle which is manufactured with a cab that encloses and protects the operator and passenger.

Offence and penalty.

172.3(3) Every person who contravenes subsection (1) and (2) is guilty of an offence and liable, on summary conviction, to a fine of not less than $20.00 and not more than $100.00.

Regulations.

172.3(4) The Lieutenant Governor in Council may make regulations prescribing the standards and specifications of helmets referred to in subsection (1).

Sec. 49 and sub-cl. 292(1)(nn)(xii) rep.

2 Section 49 and sub-clause 292(1)(nn)(xii) of the Act are repealed.

Sec. 292 am.

3 Section 292 of the Act is amended by adding thereto, immediately after clause (1)(rrr) thereof, the following clauses:

(sss) prescribing and restricting the power and size of motorcycles that may be operated by a person during the first 2 years after he is issued a licence to operate a motorcycle;

(ttt) requiring any person who operates a motorcycle to wear eye protection equipment approved by the regulations;

(uuu) requiring a person to produce to the Registrar written evidence that he has successfully passed a Motorcycle Rider Safety Program approved by the regulations before a licence to operate a motorcycle is issued to that person;

(vvv) requiring the operators of motorcycles to have the headlights of the motorcycles on at all times while the motorcycles are in operation on a highway;

(www) exempting certain persons, classes of persons or members of certain groups or organizations from the requirements of part or all of the provisions of section 172.2 or 172.3.

Commencement of Act.

4 This Act comes into force on a day fixed by proclamation.

Printed by the Queen's Printer for the Province of Manitoba

Manitoba Regulation 257/83

Being a Regulation Respecting Child Seating and Restraint System Requirements Under The Highway Traffic Act

(Filed December 14, 1983)

1. In this regulation "Act" means The Highway Traffic Act.

2. For the purpose of subsection 172.2(9) of the Act, a child seating and restraint system is one that complies with the requirements of the Motor Vehicle Safety Regulations under the Motor Vehicle Safety Act (Canada) and has been properly installed in a motor vehicle.

3. Subsection 172.2(9) of the Act does not apply

   (a) where a motor vehicle

      (i) is registered in another province or jurisdiction which does not require the use of child restraint systems; or

      (ii) is a u-drive vehicle rented for a period not exceeding 21 days; or

      (iii) is a taxicab, while it is transporting for hire a passenger;

   (b) where a certificate signed by a qualified medical practitioner certifying that the person is, during the period stated in the certificate, unable for medical reasons to wear a child restraint system and upon request made by a peace officer produces the certificate;

   (c) where to the satisfaction of a peace officer, the person is of such size or build or possesses such other physical characteristics that he would be unable to be constrained in a child restraint system;

   (d) to the casual and occasional transportation of a child or children in a vehicle driven by a person who is not the parent of the child or children and the vehicle is not equipped with a child restraint system;

   (e) where a motor vehicle is not equipped with safety belts as required under the Canadian Motor Vehicle Safety Standards.

4. This regulation comes into force on January 1, 1984.

Printed by the Queen's Printer for the Province of Manitoba

Manitoba Regulation 258/83

Being a Regulation Respecting Exemptions from the Requirements to Use Seat Belts in Motor Vehicles Under The Highway Traffic Act

(Filed December 14, 1983)

1. The provisions of subsections 172.2 (3) and (4) of The Highway Traffic Act as enacted by Chapter 51 of the Statutes of Manitoba 1982/83 do not apply to:

   persons riding on or in a motor vehicle in a lawfully permitted parade.

2. This regulation comes into force January 1st, 1984.

Manitoba Regulation 259/83

Being a Regulation Respecting Exemptions from the Requirements to Use Motorcycle Safety Helmets by Riders of Motorcycles Under The Highway Traffic Act

(Filed December 14, 1983)

1. The provisions of subsection 172.3 (1) of The Highway Traffic Act as enacted by Chapter 51 of the Statutes of Manitoba 1982/83 do not apply to:

   (a) persons riding motorcycles in a lawfully permitted and authorized parade; and

   (b) bona fide members of the Sikh religion.

2. This regulation comes into force January 1st, 1984.

Printed by the Queen's Printer for the Province of Manitoba

Manitoba Regulation 260/83

Being a Regulation Respecting Safety Helmet Requirements Under The Highway Traffic Act

(Filed December 14, 1983)

1. A helmet worn by a person operating a motorcycle, moped or motor-assisted bicycle on a highway shall conform to the requirements of any one of the following standards:

   (a) Canadian Standards Association Standard D230, Safety Helmets for Motorcycle Riders, and shall bear the monogram of the Canadian Standards Association Testing Laboratories.

   (b) Snell Memorial Foundation and shall have affixed thereto the certificate of Snell Memorial Foundation.

   (c) United States of America Federal Motor Vehicle Safety Standard 218 and shall bear the Symbol DOT.

   (d) American National Standard Specifications for Protective Headgear for Vehicular User 290.1 and shall bear the American National Standard Institute label.

   (e) British Standards Institute respecting motorcycle helmets.

2. This regulation comes into force January 1st, 1984.

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Use of seat belt assembly required

138.—(1) In this section "seat belt assembly" means a device or assembly composed of straps, webbing or similar material that restrains the movement of a person in order to prevent or mitigate injury to the person and includes a pelvic restraint or a pelvic restraint in combination with a torso restraint.

(2) No person shall operate on a public highway a vehicle in which a seat belt assembly required under the provisions of the *Motor Vehicle Safety Act* (Canada) at the time that the vehicle was manufactured or imported into Canada has been removed, rendered partly or wholly inoperative or modified so as to reduce its effectiveness.

(3) Subject to subsection (5), every person who operates on a public highway a vehicle in which a seat belt assembly is provided for the driver shall wear the complete seat belt assembly in a properly adjusted and securely fastened manner but, where a seat belt assembly comprises a pelvic restraint and a torso restraint which are not joined, the driver shall be required to wear the pelvic restraint only.

(4) Subject to subsection (5), every person who is a passenger on a public highway, and is seated to the right or left of the driver at approximately the same distance from the windshield as the driver, in a vehicle in which a seat belt assembly is provided for the seating position occupied by the passenger shall wear the complete seat belt assembly in a properly adjusted and securely fastened manner but, where a seat belt assembly comprises a pelvic restraint and a torso restraint which are not joined, the passenger shall be required to wear the pelvic restaint only.

(5) Subsections (3) and (4) do not apply to a person:

(*a*) driving a vehicle in reverse;

(*b*) who holds a certificate signed by a duly qualified medical practitioner certifying that the person is:

(*i*) for the period stated in the certificate, unable for medical reasons to wear a seat belt assembly; or

(*ii*) because of his size, build or other physical characteristic, unable to wear a seat belt assembly;

(*c*) who is actually engaged in work which requires him to alight from and re-enter a vehicle at frequent intervals and who, while engaged in the work, does not drive or travel in that vehicle at a speed exceeding forty kilometres (24.86 miles) per hour; or

(*d*) under the age of sixteen years.

(6) No person shall operate on a public highway a vehicle in which there is a passenger who has attained the age of five years or whose weight exceeds fifty pounds, and who is under sixteen years of age and occupies a seating position for which a seat belt assembly has been provided and who is seated to the right or left of the driver at approximately the same distance from the windshield as the driver, unless that passenger is wearing the complete seat belt assembly in a properly adjusted and securely fastened manner.

(7) Subsection (6) does not apply where the passenger:

(*a*) is the holder of a certificate signed by a duly qualified medical practitioner certifying that the passenger is:

(*i*) for the period stated in the certificate, unable for medical reasons to wear a seat belt assembly; or

(*ii*) because of his size, build or other physical characteristic, unable to wear a seat belt assembly;

(*b*) is actually engaged in work which requires him to alight from and re-enter the vehicle at frequent intervals and the vehicle does not travel at a speed exceeding forty kilometres (24.86 miles) per hour; or

(*c*) is occupying and properly secured in a child seating and restraint system as prescribed under the regulations.

(8) No person shall sell or offer or keep for sale for use in a vehicle any seat belt assembly that does not conform to the standards and specifications prescribed by the board.

(9) No person shall install in a vehicle or use any seat belt assembly that does not conform to the standards and specifications prescribed by the board.

(10) The board may, with the approval of the Lieutenant Governor in Council, make regulations:

(*a*) requiring the use of child seating and restraint systems in vehicles on public highways;

(*b*) providing for the exemption from any of the provisions of this section of:

(*i*) any type or class of vehicle;

(*ii*) any class of drivers or passengers in vehicles. 1976-77, c. 100, s. 12.

Regulations Made Under

Section 138 of The Vehicles Act

1. These regulations may be cited as "The Seat Belt Exemption Regulations".

2. The provisions of Section 138 of the Act do not apply to:

   (a) a person while operating a public service vehicle registered in Class PT, while transporting passengers for compensation;

   (b) a police officer or police constable while transporting prisoners or such other persons who in the opinion of the police officer or police constable represent a danger to the personal safety of a police officer or police constable, except where provision has been made for the protection of the police officer or police constable;

   (c) a traffic officer or such other person authorized by the Board to conduct driver examinations, while conducting such examinations in a vehicle not equipped with dual controls; and

   (d) a passenger in a vehicle not equipped with dual controls operated by the holder of a Class 7 licence or a licence bearing an endorsement authorizing the holder to operate the vehicle as a learner.

3. These regulations shall come into force on, from and after October 1, 1977.

R.R.S. chapter V-3 Reg 2

SCHEDULE

itle

1 These regulations may be cited as The Child Seating and Restraint System Regulations, 1982.

nterpretation

2 In these regulations:

hild"

(a) "child" means a child born after June 30, 1980;

estraint system"

(b) "restraint system" means a Type I restraint system, a Type II restraint system, a Type III restraint system or a Type IV restraint system;

ype I restraint system

(c) "Type I restraint system" means:

(i) a General Motors Infant Love Seat Part No. 996 505, or its equivalent;

(ii) a Ford Motor Infant Carrier Part No. D8AZ 19E 535A, or its equivalent;

(iii) a Chrysler Motor Infant Safety Carrier Part No. 3744 975, or its equivalent; or

(iv) an infant seating and restraint system that meets the standards set pursuant to the Motor Vehicle Safety Regulations (Canada);

ype II restraint system"

(d) "Type II restraint system" means any child car seat which is designed for the transportation of a child whose weight is less than nine kilograms in a rear-facing position, and that complies with the Children's Car Seats and Harnesses Regulations (Canada);

Type III restraint system"

(e) "Type III restraint system" means any child car seat which is designed for the transportation of a child whose weight is nine kilograms or more but less than 18 kilograms in a forward-facing position, and that complies with the Children's Car Seats and Harnesses Regulations (Canada);

LEGISLATIVE COUNCIL
Mr Chairman
Member

Type IV restraint system"

(f) "Type IV restraint system" means the pelvic restraint of a seat belt assembly.

References to federal regulations

3 A reference in these regulations to regulations made pursuant to an Act of the Parliament of Canada is deemed to be a reference to the regulations as amended from time to time.

Non-application

4(1) These regulations do not apply to the operator of a vehicle registered outside Saskatchewan.

(2) Section 5 does not apply to:

(a) the operator of a vehicle registered as Class PT; or

(b) the operator of a vehicle registered to a person to whom section 64 of The Vehicles Act applies.

Child under nine kilograms

5 No person shall operate a vehicle on a public highway in which there is carried a child whose weight is less than nine kilograms and in which a seating position fitted with a seat belt assembly is available unless:

(a) the child is secured in a Type I or Type II restraint system; and

(b) the restraint system is secured by the pelvic restraint of a seat belt assembly in the manner prescribed by the manufacturer of the restraint system, and all harnesses, straps and buckles designed to secure the child in the restraint system are properly adjusted and securely fastened.

Child between nine and 18 kilograms

6(1) No person shall operate a vehicle on a public highway in which there is carried a child whose weight is nine kilograms or more but less than 18 kilograms and in which a seating position fitted with a seat belt assembly is available unless the child is secured in:

(a) a Type III restraint system that is secured by the pelvic restraint of a seat belt assembly and, where practicable, by all other anchorage straps and devices in the manner prescribed by the manufacturer of the restraint system, and all harnesses, straps and buckles designed to secure the child in the restraint system are properly adjusted and securely fastened; or

(b) in the case of a vehicle registered in the name of a person other than the parent or legal guardian of the child, the child is secured in a restraint system described in clause (a) or in a Type IV restraint system.

ild between 18 and 22.680 kilograms

7 No person shall operate a vehicle on a public highway in which there is carried a child whose weight is greater than 18 kilograms but not greater than 22.680 kilograms and in which a seating position fitted with a seat belt assembly is available, unless the child is secured in a Type IV restraint system.

sk. Reg. 58/80 repealed

8 Saskatchewan Regulations 58/80 are repealed.

ing into force 9 These regulations come into force on the day on which they are filed with the Registrar of Regulations.

(d) being satisfied that the life of a person will be endangered by the delay involved in undergoing a test,

whichever first occurs, whereupon the suspension is terminated.

(4) The driver's licence of a person who refuses to surrender his driver's licence under this section is invalid for every purpose and is suspended until the expiration of the period of suspension that would otherwise have followed under subsection (3).

(5) This section does not apply where a peace officer intends to lay an information under the *Criminal Code* (Canada) containing an allegation respecting the driver or to arrest the driver.

(6) Where a driver who has been requested to surrender his licence under this section does not hold a driver's licence issued under this Act, or it has expired, he shall be deemed to be a person whose licence is suspended until the occurrence of an event or the expiry of the time at which, had he been the holder of such a licence, the peace officer would have been required to return the licence to him under subsection (3).

1966-30-34; 1968-32-20; 1970-28-22 [*to be repealed on proclamation of section 214, 1977-77-3*].

Regulations

215. (1) The Lieutenant Governor in Council may make regulations fixing standards of safety and repair of motor vehicles, requiring owners and operators of motor vehicles to present them for inspection as to safety and repair at a place and at times prescribed in the regulations, appointing inspectors for that purpose, prescribing fees for inspection, prohibiting the operation on a highway of motor vehicles that have not been presented as required for inspection or that have not been passed on being inspected, and making the regulations under this section applicable in all or any part of the Province.

(2) The Attorney General, for and on behalf of Her Majesty in right of the Province, may enter an agreement or arrangement with a municipality to implement regulations made under subsection (1), and a municipality may by resolution enter that agreement or arrangement.

(3) In this section "motor vehicles" includes trailers and semi-trailers.

1966-30-34; 1968-32-21.

Equipment of motor vehicles

216. (1) A person shall not drive or operate a motor vehicle or trailer on a highway or rent a motor vehicle or trailer unless it is equipped in all respects in compliance with this Act and the regulations.

(2) A peace officer may at any reasonable time require a person who carries on the business of renting motor vehicles or trailers, or both,

(a) to allow the peace officer to inspect a motor vehicle or trailer offered by the person for rental; or

(b) to move a motor vehicle or trailer offered by the person for rental to a place designated by the peace officer, and there to allow the peace officer or a person authorized by him to inspect the motor vehicle or trailer.

RS1960-253-205; 1966-30-8.

Seat belt assembly

217. (1) A person shall not sell, offer for sale or operate on a highway a motor vehicle required to be registered and licensed only under this Act and manufactured or

assembled after December 1, 1963, other than a motorcycle, unless it is equipped with not less than 2 seat belt assemblies for use in the front seat in accordance with the regulations.

(2) In this section "seat belt assembly" means a device or assembly suitably fastened to the motor vehicle composed of straps, webbing or similar material that restrains the movement of a person in order to prevent or mitigate injury to the person and includes a pelvic restraint, an upper torso restraint or both of them.

(3) A person shall not drive or operate a motor vehicle on a highway in which a seat belt assembly required under this section or the *Motor Vehicle Safety Act* (Canada) at the time the motor vehicle was manufactured, assembled or imported into Canada has been removed, rendered partly or wholly inoperative, or modified to reduce its effectiveness.

(4) A person in a motor vehicle being driven or operated on a highway shall, where the motor vehicle has properly attached to it a seat belt assembly for the seating position occupied by that person, wear the complete seat belt assembly in a properly adjusted and securely fastened manner.

(5) Subsection (4) does not apply to a person

(a) driving a motor vehicle in reverse;

(b) who is in possession of, and produces on request to a peace officer, a valid and subsisting certificate

(i) issued by the superintendent on the recommendation of a medical practitioner; or

(ii) issued in the prescribed form by a medical practitioner for a period not exceeding 6 months;

certifying that the person is,

(iii) for the period stated in the certificate, unable for medical reasons to wear a seat belt assembly; or

(iv) because of the person's size, build or other physical characteristic, unable to wear a seat belt assembly; or

(c) who is actually engaged in work which requires him to alight from and re-enter the motor vehicle at frequent intervals and who, while engaged in that work, does not drive or travel in that vehicle at a speed exceeding 40 km/h; or

(d) under age 16.

(6) A person shall not drive on a highway a motor vehicle in which there is a passenger who has attained age 6 but is under age 16 and who occupies a seating position for which a seat belt assembly is provided unless that passenger is wearing the complete seat belt assembly in a properly adjusted and securely fastened manner.

(7) Subsection (6) does not apply where the passenger

(a) is in possession of, and produces on request to a peace officer, a valid and subsisting certificate

(i) issued by the superintendent on the recommendation of a medical practitioner; or

(ii) issued in the prescribed form by a medical practitioner for a period not exceeding 6 months,

certifying that the person is,

(iii) for the period stated in the certificate, unable for medical reasons to wear a seat belt assembly; or

(iv) because of the person's size, build or other physical characteristic, unable to wear a seat belt assembly; or

(b) is actually engaged in work which requires him to alight from and re-enter the motor vehicle at frequent intervals and the motor vehicle does not travel at a speed exceeding 40 km/h.

(8) Notwithstanding this section, where a seat belt assembly consists of a pelvic restraint and a separate upper torso restraint, only the pelvic restraint need be worn.

(9) The Lieutenant Governor in Council may make regulations

(a) requiring the use of child seating and restraint systems in motor vehicles on highways and prescribing the specifications for them;

(b) defining the age of a child for the purpose of paragraph (a); and

(c) providing for the exemption from any provision of this section of any

(i) type or class of motor vehicle; and

(ii) class or group of drivers or passengers in motor vehicles.

(10) A person who contravenes this section commits an offence and is liable to a fine of not more than $100.

1977-24-1; 1977-53-1.

Helmets

218. A person shall not ride on a motorcycle unless he is properly wearing a safety helmet of a type approved by the superintendent.

1965-27-34; 1966-30-31.

Sale of motor vehicle contrary to regulations

219. A person shall not sell, offer for sale, expose or display for sale or deliver over to a purchaser for use a motor vehicle, trailer or equipment for them that is not in accordance with this Act and the regulations.

1970-28-23; 1971-58-10.

Canada Safety Standards

220. (1) A manufacturer or distributor of a motor vehicle or trailer manufactured in the Province for sale in the Province and a dealer shall not sell, offer for sale, display for sale or deliver over to a person for use a new motor vehicle or trailer of a class prescribed by the *Motor Vehicle Safety Act* (Canada) unless the motor vehicle or trailer and its components comply with safety standards prescribed in the *Motor Vehicle Safety Act* (Canada) and the regulations under it, bear the National Safety Mark and display the statement of compliance as required by those regulations.

(2) A distributor or dealer shall not modify or alter a new motor vehicle or trailer, or exchange components of a new motor vehicle or trailer of a class for which standards are prescribed, in a manner that the motor vehicle or trailer does not comply with the safety standards prescribed in the *Motor Vehicle Safety Act* (Canada) and the regulations made under it.

1973-58-26; 1976-35-29.

Report of medical practitioner

221. Every legally qualified medical practitioner shall report to the superintendent the name, address and medical condition of a patient 16 years of age or over who

Defective motor vehicles

7.09. Where, in the opinion of any peace officer a motor vehicle is, by reason of any mechanical or constructional defect, unsafe, no person who has knowledge of the defect and of the opinion of the peace officer shall operate that motor vehicle or cause it to be operated on any highway until the defect has been remedied to the satisfaction of the peace officer.

Inspection of lamps

7.10. The owner and every person in charge of a motor vehicle driven or operated, or about to be driven or operated, on any highway shall, upon the request of any peace officer, forthwith take the motor vehicle to a place designated by the peace officer and submit the motor vehicle there for the inspection and testing of the lamps with which the motor vehicle is equipped.

Certificate of lamp adjustment

7.11. Where any peace officer is satisfied, either from an inspection of a motor vehicle on the highway or at a testing station, that the lamps with which the motor vehicle is equipped are in need of adjustment, he may deliver to the person in charge of the motor vehicle a notice in writing requiring him to cause the lamps or any of them to be adjusted and requiring him to furnish proof of the satisfactory adjustment thereof in compliance with the regulations to the peace officer within 48 hours after the delivery of the notice. Proof of satisfactory adjustment for the purposes of this regulation may be furnished by a certificate of adjustment signed by the owner or manager of an adjusting station approved by the Superintendent at which the lamps have been adjusted, or by a certificate of a peace officer to whom the motor vehicle is submitted for testing after the lamps have been adjusted.

Lamp adjustment station

7.12. Upon proof to the satisfaction of the Superintendent that any garage or service station is equipped with adequate facilities and a competent staff for the testing and adjustment of lamps, he may, without the payment of any fee, issue to the owner or manager thereof an approval in writing constituting that garage or service station an approved adjusting station for lamps for the purposes of this section; and the Superintendent may at any time, in his discretion, revoke and cancel any approval so given. As a condition of his approval of adjusting stations, the Superintendent may fix a maximum fee or charge which shall be observed in respect of the adjustments of lamps and the furnishing of certificates of adjustment.

Safety belts

7.13. (a) In this section "safety belt" means a single occupancy safety seat belt for use in a motor vehicle.

(b) The manufacturer of a safety belt assembly shall not sell the assembly or offer it for sale unless

(i) it conforms to the standard of performance for safety belt assemblies made by the Society of Automotive Engineers or the Canadian Standards Association, and

(ii) it bears an identifying mark showing compliance with the standard of performance for safety belt assemblies made by the Society of Automotive Engineers or the Canadian Standards Association, as the case may be.

(c) No person shall sell or offer for sale a safety belt assembly unless the assembly bears an identifying mark as required in paragraph (ii) of clause (b). (O.C. 420/64.)

Division 31—Trailers and Mobile Homes
(O.C. 823/71.)

31.01. Trailers, mobile homes, or recreational vehicles, and the equipment therein, manufactured on or after the first day of October 1972, shall conform in all respects to the standards for trailers, mobile homes, or recreational vehicles from time to time made by the Canadian Standards Association, now numbered C.S.A. Standard Z 240.0 and Z 240.1, entitled "Definitions for Mobile Housing and Recreational Vehicles" and "Vehicle Requirements for Mobile Homes and Recreational Vehicles" respectively; and labelled in accordance with such standard. (O.C. 823/71, eff. July 1, 1971; O.C. 3084/72.)

31.02. For the purpose of section 31.01, a recreational vehicle as defined in C.S.A. Standard Z 240.0 does not include a motorhome as defined in section 1 of the Act. (O.C. 1218/74.)

Division 32—Seat Belt Assembly
(O.C. 3103/77.)

32.01. In this Division, "taxi" means a motor vehicle having a seating capacity of not more than 9 persons which, with its driver, is operated or plies for hire by members of the public.

32.02. A taxi driver, while operating a taxi on a highway at a speed of less than 70 kilometres per hour, is exempt from the provisions of subsection (4) of section 217 of the Act.

32.03. A taxi driver is exempt from the provisions of subsection (6) of section 217 of the Act while transporting a passenger for hire in a taxi.

32.04. (*a*) An emergency vehicle driven by or on behalf of a peace officer in the discharge of his duty is exempt from the requirement that

(i) upper torso restraints, and

(ii) a seat belt assembly in the centre front seat seating position, and

(iii) seat belt assemblies in the rear seating position,

not be removed, rendered partly or wholly inoperative or modified so as to reduce their effectiveness.

(b) A person who is in the custody or care of a peace officer is exempt from subsection (4) of section 217 of the Act.

(c) A peace officer who, in the lawful performance of his duty, is transporting a person in his custody or care is exempt from subsections (3), (4), and (6) of section 217 of the Act.

(d) When a peace officer has reasonable and probable grounds to believe the use of a seat belt assembly would obstruct the performance of his duties, the peace officer and any passenger is exempt from subsections (3), (4), and (6) of section 217 of the Act. (O.C. 389/78.)

Division 33—Year-round Motor Vehicle Licence Renewal
(O.C. 676/79.)

33.01. A licence may be issued under the Act in respect of a period of less than 12 months where

(a) the Superintendent considers it necessary to designate an earlier expiry date in order to spread the work of licence renewal more uniformly over the year, or

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POLICY UPDATE

May 24, 1983

CHILD RESTRAINT LAWS ENACTED IN 39 STATES AND THE DISTRICT OF COLUMBIA

Child Passenger Safety advocates have worked diligently this year with spectacular results: 20 states passed child restraint laws in the first 5 months of 1983. Nevada and Colorado are the most recent states to report passage, bringing the total number of mandatory usage laws to 40. In addition, 6 states, including Illinois where efforts are underway to strengthen the current law, still have legislation pending. Currently, all states east of the Mississippi have mandatory use laws with the exception of Vermont, where conferees were unable to agree on a compromise of House and Senate versions, and Pennsylvania, where bills are still pending in a recalcitrant House. The Vermont bills will carry over intact to 1984, the second year of their session.

Our review of recent legislation indicates that more states are including safety belt provisions in their laws. In 1983, 17 of the 20 states with new laws had belt provisions; nationally, 20 of the 39 states allow belts to be substituted for restraints after a certain age. The statuatory age varies from state to state; approximately 1/3 of the states specify over 1 year of age, and 1/3 specify over 3 years of age. Three states, Massachusetts, Oregon, and Washington, allow belt-use substitution at any age under any circumstances. California allows it at any age if the parent is not driving and Oklahoma allows it in the rear seat only at any age. Three other states, Michigan, Connecticut and South Carolina, allow only rear seat belt substitution and only if the child is over 1 year old, and Nevada allows it only if the child is over 4 years old. Ohio and Maine have similar provisions to California law and limit belt use substitution to non-parental driving situations only, but differ from California by stipulating that the child must be at least 1 year old. Additionally, Ohio law holds day care transporters to the same standard as parents, and does not allow them to substitute restraints for safety belts.

Clearly, use of the belt provision is one answer to the problem of parents who cannot or will not obtain child restraints. Research into the efficacy of belts versus restraints generally recognizes the superiority offered by the restraints. Many advocates including the Physicians for Automotive Safety feel that the laws need to address alternative methods of protection when restraints are not available. The fear that safety belts will seriously injure a small child may be outweighed by injuries that

occur when the child is not restrained in any manner. In the latter case, belts are the much preferred alternative. Additionally, with the linkage between child restraints and safety belts, it is expected that adult mandatory belt use laws may be easier to obtain in the future.

This year, Rhode Island narrowly missed becoming the first state to adopt a mandatory safety belt law for adults. Instead of passing SB227, the House agreed to appoint a special study committee and to seriously consider the committee's recommendations when they report back early next year. Efforts are also underway in New York, where the chairmen of the Transportation Committees in both the Assembly and the Senate have introduced joint bills. AF5059 and SB2191 would amend New York's current child restraint law by raising the age limit to 7 years old in 1984, and then raising it every year until 1987, when children 10 years old and under would have to be restrained. The bills have passed the Transportation Committees in both Houses, the Senate version is awaiting floor action and the Assembly version is in the Codes Committee. Optimism is running high although the session is due to end June 14th. In Michigan, proponents of HB4203 are assessing House support at this time before deciding on their course of action. That bill would mandate belt use for all front seat passengers.

Since Tennessee's law in 1977 and Rhode Island's in 1980, over the past three years, the number of states with laws has grown steadily. 7 states were successful in 1981, 11 states in 1982 and 20 states so far this year. The focus seems to be shifting now towards implementation of comprehensive programs to support the laws. Toward that end, a number of federal bills have been introduced that would provide money to states that have enacted legislation. HR2352, introduced by Congressman Mike Barnes (D-MD) would provide $25 million over 3 years to states that have mandatory child restraint laws and implement comprehensive programs. The state must have a law that includes children less than 5 years old or 40 lbs, or lesser ages and weight as determined by rulemaking. NHTSA rulemaking would also establish performance standards on effective program elements. Such standards could include, but would not be limited to, loaner programs, enforcement of laws, public information and education programs, and the training of personnel to use child restraints correctly. The state could qualify for a maximum of 25% of its FY83 402 money. Congressman Al Gore (D-TN), a co-sponsor of the Barnes bill will introduce his own legislation in mid-June. His current draft would provide $48 million over 6 years and would also include a pedestrian safety program. The proposed Gore bill appears to be much more specification-oriented than Barnes' version. It is expected that the House Public Works and Transportation Committee will consider these bills by late summer.

On the Senate side, S.1108 introduced by Senator John Danforth (R-MO) would provide $10 million the first year and $20 million in the second year to states that adopt child restraint laws. The money in S.1108 would be limited to 10% of a state's current 402 funds, would be available only once to any state, and would be earmarked for enforcement assistance only.

Included with the UPDATE is a compilation of the 40 state child restraint laws and the pending legislation as of May 18th. We welcome all comments.

STATE	DESCRIPTION
ALABAMA S24 Enacted 1982	All children less than 3yrs old must be in c.r. when riding in m.v. registered in state. Fine not to exceed $10. Effective 7/1/82.
ARIZONA HB2312 Enacted 1983	All children less than 4yrs old must be in c.r. when riding in non-commercial m.v. owned/operated by parent/l.g. and registered in state. If limited-seating vehicle(sports car), at least 1 child must be restrained. Warning only until 7/1/84, thereafter $50 fine, waived upon acquisition. Hospitals must provide new parents with copy of law and information on community loaner programs. Child Passenger Restraint Fund to be established from fine monies and donations to be used to purchase c.r.'s for indigent people.
ARKANSAS HB454 Enacted 1983	All children less than 5yrs old must be in c.r. when riding in m.v., pick-up, van registered in state and driven by someone who regularly transports children (definition not given). Between 3-5yrs old, safety belt may be substituted. Warning only for 1st year, thereafter $15-25 fine, waivable. $ earmarked for loaner, educational programs. Effective 8/1/83.
CALIFORNIA SB537 Enacted 1982	All children less than 4yrs old or weighing less than 40lbs must be in c.r. when riding in m.v. weighing less than 6001lbs, registered in state and operated by parent/l.g. If parent/l.g. is not driving, safety belt may be substituted. Driver subject to fine if parent not in car, otherwise parent whether driving or not driving is subject to fine. Ticket waived upon acquisition of seat if first offense. $50 fine for 2nd offense, additional $50 for subsequent offenses up to maximum of $200. Effective 1/1/83.
COLORADO HB1070 Enacted 1983	All children less than 4yrs and 40lbs must be in c.r. when riding in m.v. driven by resident of state. $25 fine, waivable. Passed both Houses in mid-May, to be signed by Gov. in mid-June. Eff. 1/1/84.
CONN. S42 Enacted 1982	All children less than 4yrs old must be in c.r. when riding in passenger m.v. in the state. Safety belt may be substituted for children between 1-4yrs if riding in back seat only. Exemption for R.V.'s, trucks weighing over 1 ton. Fine $15-100, waived upon acquisition and installation of seat. Effective 10/1/82.
DELAWARE HB154 Enacted 1982	All children less than 4yrs old must be in c.r. when riding in m.v. owned/operation by resident parent/l.g. $25 fine waived upon acquisition of c.r. Effective 6/2/82. Fine effective 8/2/82. State-wide loaner program in place.
DISTRICT OF COLUMBIA 4-434 Enacted 1982	All children less than 6yrs old must be in c.r. when riding in m.v. registered in D.C. From 3-6yrs, safety belt may be substituted. Exemption if # of children in one family exceeds # of seating positions, all available belts must be used. $25 fine, waivable for 1st offense only. (Parent or driver can submit proof). Approved by U.S. Congress 3/83. Effective 7/1/83.
FLORIDA HB289 Enacted 1982	All children less than 6yrs old must be in c.r. when riding in passenger m.v. or pick-up truck registered in Florida and owned/operated by parent/l.g. Safety belt may be substituted for children from 4 to 6yrs. $15 fine, waived upon proof of purchase. Effective 7/1/83.
GEORGIA SB59 Enacted 1983	All children less than 4yrs must be in c.r. when riding in m.v. registered in state. Between the ages of 3-4yrs, safety belt may be substituted. Exemption for car pools, attending to personal needs of child. Max. $25 fine, waivable. Effective 7/1/84.

HAWAII HB890 Enacted 1983	All children less than 4yrs old must be in c.r. when riding in m.v. From 3-4yrs, safety belt may be substituted. If number of people exceeds the number of available safety belts, all belts must be in use and unrestrained children must be in rear seat. Max. $100.00 fine. Gov. has until 6/14 to veto or 6/28 to sign. Effective 7/1/83.
HB2742 Enacted 1982	$25 income tax credit for purchase of c.r. Signed by Gov. 7/27/82. Retroactive impact 1/1/82.
KANSAS HB2208 Enacted 1981	All children less than 2yrs old must be in c.r. when riding in front seat of passenger m.v. owned/operated by parent/l.g. Oral warning only. DOT to develop program of public information. Effective 1/1/82.
ILLINOIS HB608 Enacted 1982	All children less than 2yrs old must be in c.r. when riding in passenger m.v. owned/operated by resident parent/l.g. Between 4-6yrs, safety belt may be substituted. Effective 7/1/83. Beginning 7/1/84, children between 2-4yrs must be in c.r. as well. First offense, warning violation only, subsequent offenses will be max. $25 fine. Exception for attending to personal needs of child.
INDIANA SB172 Enacted 1983	All children less than 5yrs old must be in c.r. when riding in m.v. registered in Indiana excluding taxis & rental vehicles. Between ages of 3-5yrs, safety belt may be substituted. Class C infraction. $50-500, waivable, otherwise judge may order acquisition within 30 days. Effective 1/1/84.
KENTUCKY SB2 Enacted 1982	All children less than 40inches tall must be in c.r. when riding in m.v. owned/operated by parent/l.g. No fine. Effective 7/15/82.
MAINE LB910 Enacted 1983	All children less than 1yr old must be in c.r. when riding in m.v., registered in state and required to be equipped with safety belts. If driven by parent/l.g., children between 1-4yrs must be in c.r. If driven by someone else, safety belt may be substituted. Exemption for both cases, if child is between 1-4yrs and all seating positions are occupied. No exemption for children less than 1yr old. Warning only for first 6 months, thereafter $25 fine for 1st violation, $50 for 2nd and subsequent. Waivable for 1st offense only. Effective 90 dys after Legislature adjourns, approximately mid-October 1983.
MARYLAND SB437 Enacted 1983	All children less than 5yrs old must be in c.r. when riding in passenger or multipurpose m.v. registered in state. Between ages of 3-5yrs, safety belt may be substituted. If number of children exceeds number of seating positions, all available positions must be utilized by children. $25 fine, waivable. To be signed 5/24. Effective 1/1/84.
MASS. HB7162 Enacted 1981	All children less than 5yrs old must be in c.r. or safety belts when riding in m.v. Exemption for taxis, vehicles not equipped with safety belts, if all other seating positions equipped with safety belts are occupied, or if child is physically unable to use restraints. Fine not to exceed $25, waived upon proof of acquisition. Effective 1/1/82.
MICHIGAN SB115 Enacted 1981	All children less than 4yrs old must be in c.r. when riding in m.v. operated by resident driver. From 1-4yrs, safety belts may be substituted if riding in back seat. Exemption for nursing mothers. Fine not to exceed $15, waived upon proof of acquisition. Effective 4/1/82.

MINNESOTA SF263 Enacted 1981	All children less than 4yrs old must be in c.r. when riding in m.v. owned/operated by parents/l.g. No fine, hazard warning only. Effective 1/1/82.
MISS. HB114 Enacted 1983	All children less than 3yrs old must be in c.r. when riding in m.v. registered in state. Exempts trucks, buses weighing more than 1 ton. $10 fine, waivable. Notice of this requirement will accompany delivery of m.v. license tags. Effective 7/1/83.
MONTANA SB22 Enacted 1983	All children less than 4yrs or 40lbs must be in c.r. when riding in m.v. driven by resident parent/l.g. or spouse. From 2-4yrs, safety belt may be substituted. $10-25, waivable upon acquisition of c.r. within 30 days. Effective 1/1/84.
NEBRASKA LB69 Enacted 1982	Any person furnishing child care must use c.r. when transporting all children less than 1yr old. Seat belt can be substituted for children over 1yr old. No upper age limit. Driver subject to fine and Child Care Center subject to license (to furnish child care) suspension/revocation. Effective 7/17/82.
LB306 Enacted 1983	All children less than 4yrs old must be in c.r. when riding in m.v. driven by resident of state. Between ages of 1-4yrs, safety belt may be substituted. Exemption for physical or medical reasons, must carry physician's statement $25 fine, waivable. Effective 90 days after legislature adjourns, approximately 9/1/83.
NEVADA AB307 Enacted 1983	All children less than 5yrs old must be in c.r when riding in m.v. registered in state. Between the ages of 4 and 5yrs, safety belt may be substituted in rear seat only. Exemption if more children than seating positions, preference given to children less than 3yrs, and all unrestrained children must ride in back seat only. $35-100 fine, waivable. To be signed by Gov. around 5/20. Effect. 7/1/83.
NEW HAMP. HB62 Enacted 1983	All children less than 5yrs old must be in c.r. or safety belt when riding in m.v. Exception for vehicles for hire. $30 fine, waivable. Effective 7/1/83.
NEW JERSEY A851 Enacted 1983	All children less than 5yrs must be in c.r. when riding in m.v. in N.J. From 18mths to 5yrs, safety belt may be substituted in rear seat only. Exemption if number of children in one family exceed # of available belts, all unrestrained children must be in back seat. $10-25 fine, waivable upon proof of acquisition. Effective 7/4/83.
NEW MEXICO SB50 Enacted 1983	All children less than 5yrs must be in c.r. when riding in passenger car, van or pick-up in registered in state. Between 1-5yrs, safety belt may be substituted in rear seat only. $50 fine, waivable. Effect. 6/17/83.
NEW YORK S3639 Enacted 1981 Amend. S8679 Enacted 1982	Originally all children less than 5yrs old must be c.r. when riding in passenger m.v. registered in state. Amended in the 82 session to children less than 4yrs old in c.r. and 4-5yrs old in c.r. or safety belts. Also amended to remove emergency vehicles from compliance. Fine of not more than $25, waived upon proof of purchase or rental of seat. Effective 4/1/82.
NORTH CAROLINA HB893 Enacted 1981	All children less than 2yrs old must be in c.r. when riding in m.v. registered in state and owned/operated by parent/l.g. Between 1-2yrs, safety belt may be substituted. Exemption if child is occupying seat where safety belts not required, and while attending to personal needs of child. Warning ticket from 7/1/82 to 6/30/84, thereafter $10 fine. UNC-HSRC will conduct effectiveness study. Effective 7/1/82 to 6/30/85.
N. DAKOTA H1587 Enacted 1983	All children less than 4yrs old must be in c.r. when riding in passenger m.v. driven by parent/l.g. Between the ages of 2-4yrs, safety belt may be substituted. $20, waivable. Effective 1/1/84.

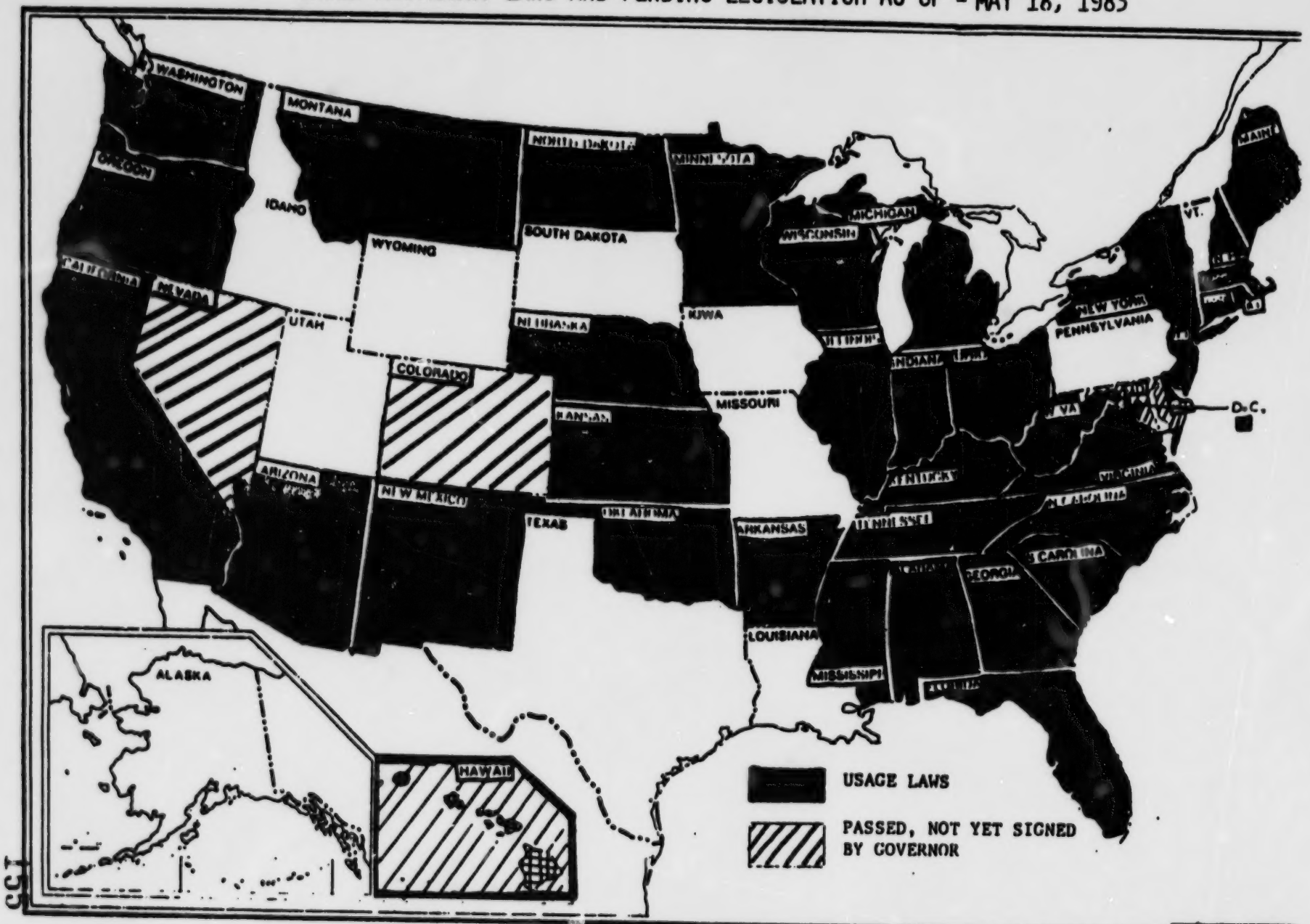
OHIO HB605 Enacted 1982	All children less than 4yrs or weighing less than 40lbs must be in c.r. when riding in m.v. owned/operated by parent/l.g. or day care center. If riding in m.v. other than those listed above but driven by resident of state, less than 1yr old must be in c.r. and 1-4yrs old, safety belts can be substituted. Exemptions for taxis and life-threatening situations. $10 fine waived upon acquisition of seat. Effective 3/7/83.
OKLAHOMA HB1005 Enacted 1983	All children less than 4yrs must be in c.r. when riding in front seat, or seat belt when riding in rear seat of m.v. driven by resident of state. Between 4-5yrs, safety belt can be substituted in front seat. Exemption if more children than seating positions and no fine. Effective 11/1/83.
OREGON SB293 Enacted 1983	All children less than 5yrs old must be in c.r. or safety belt when riding in m.v. registered in state. Exemption if all seating positions are occupied. Exemption for physical or medical reasons must obtain written statement from physician and DMV will issue certificate. No fine for first 6mths, thereafter $20, waivable upon acquisition. Effective 1/1/84.
RHODE ISLAND H5730 Enacted 1980	All children less than 3yrs must be in c.r. when riding in front seat of m.v. $15 fine. Effective 7/1/80. Amended to include back seat. Fine waived upon proof of purchase. Effective 4/81.
S. CAROLINA A350 Enacted 1983	All children less than 4yrs must be in c.r. when riding in m.v. registered in state. Between 1-4yrs old, safety belt can be substituted in back seat only. If more people than seating positions, priority given to children less than 3yrs old. Exemption for feeding or medical problems. $25 fine, waivable. Tax credit for purchase, exempt taxis, emergency vehicles. Effective 7/1/84. Tax credit effective 7/1/83.
TENNESSEE HB300 Enacted 1977	All children less than 4yrs old must be in c.r. or held in arms of older passenger when riding in m.v. owned/operated by parent/l.g. Exemption for trucks, r.v.'s $2-10 fine. Effective 1/1/78. Amended to exclude being held in the arms except when mother is attending to needs of child. Effective 4/1/81.
VIRGINIA HB413 Enacted 1982	All children less than 4yrs old must be in c.r. when riding in m.v. registered in state and owned/operated by parent/l.g. Between ages of 3-4yrs, safety belt may be substituted. $25 fine waived upon proof of acquisition or for financial inability. Fine money earmarked for state loaner programs. Effective 1/1/83.
WASHINGTON SB3203 Enacted 1983	All children less than 5yrs old must be in c.r. when riding in m.v. owned/operated by parent/l.g. Between 1-5yrs old, safety belt may be substituted. Warning only from 1/1/84 to 7/1/84, thereafter minimum $30 fine waivable.
WEST VIRGINA HB517 Enacted 1981	All children less than 5yrs old must be in c.r. when riding in m.v. registered in state. Safety belt can be substituted for 3-4yrs old. $10-20 fine waived upon proof of purchase. Effective 7/10/81.
WISCONSIN AB600 Enacted 1982	All children less than 2yrs old must in c.r. when riding in m.v. owned/operated by parent/l.g. From 2-4yrs, safety belt may be substituted. Fine for child under 2yrs is $30-75. Fine for child between 2-4yrs, $10-25; if 2nd offense within 3yrs, $25-200. Effective 12/1/82.

CHILD RESTRAINT PENDING LEGISLATION-MAY 18, 1983

STATE	DESCRIPTION OF PENDING LEGISLATION
ALASKA HB262	Intro. by Rep. Clocksin. All children less than 6yrs old must be in c.r. when riding in non-commerical m.v. Between ages of 4 and 6yrs, safety belt may be substituted. Exemption if all seating positions are occupied or for physical/medical reasons. Fine unclear, points may be assessed unless c.r. is acquired within 30days of citation. Loaner program established. Dept. of Public Safety to provide c.r.'s to hospitals & birthing ctrs as funds are available. Police to advise cited vehicles of loaner programs. No seat may be sold, installed unless meets FMVSS 213. Non-use may be admitted into evidence as negligence in civil action. This is a Comm. substitute. Passed first 2 Comm. in third Comm. now. Session to end around 6/15/83.
SB163	Intro. by Sen Fischer. Similiar to HB262 except nothing about loaner programs, no prohibition against selling seats not meeting 213, and nothing about liability issue. This is a Comm. substitute. Passed first Comm. Awaiting date for floor vote.
ILLINOIS HB1	Amendment to current law. Would include requirement that children between the ages of 2 and 4yrs be restrained in c.r. this year (rather than 7/1/84). Deletes warning provision for first offense (Il. has no method of recording warnings on licenses) and adds $25 fine instead. Passed House 83-23. In Senate Committee, committee vote expected 6/3/83.
LOUISIANA HB218	Intro. by Rep. Baker. All children less than 5yrs old must be in c.r. when riding in privately-owned m.v. driven by resident of state. Between 3 and 5yrs, safety belt may be substituted in rear seat only. Exemption if # of children in one family exceed # of available safety belts, all unrestrained children must be in rear seat only. Also exemption for emergency or for medical/physical problems. Warning only until 1/1/84, thereafter $25-50 fine, waivable. Passed House, wide margin in mid-May. In Senate Committee.
MISSOURI HB29	Intro. by Rep. Reeves. All children less than 4yrs old must be in restrained in c.r. when riding in front seat of m.v. owned/operated by parent/l.g. If riding in rear seat, safety belt may be substituted. If more children than seating positions, all unrestrained children must be in back seat. $15 fine, waivable for installation or financial inability. Evidence of non-restraint use may be admissable in civil suit. Effect. 1/84. Passed House in mid-March. Passed Senate Committee 5/17 with amendment raising fine from $15 not including court costs to $50 including court costs. Session due to end around 6/15/83.
PENN. SB21	Intro. by Rep. Holl. All children less than 4yrs old or under 40lbs must be in c.r. when riding in m.v registered in state. $50 fine, waivable. Exemption for physical/medical problems. Original bill had hazard warning only. 35-34 vote added fine and then passed Senate 38-10. In House Consumer Affairs Comm.
HB134	All children less than 4yrs or 40lbs must be in c.r. when riding in passenger m.v. registered in state. $25 fine, waivable. Rep Arty. In House Consumer Affairs Comm. Expect to be combined with SB21.

STATE	DESCRIPTION OF PENDING LEGISLATION
PA cont'd HB3	All children less than 4yrs old must be in c.r. when riding in m.v. owned/operated by parent/l.g. $25 fine, waivable. Exemption if physically/medically unable. Intro. by Rep Arty, Greenwood. In Transportation Comm. Major efforts being focussed on other 2 bills.
TEXAS SB6 HB3	All children less than 4yrs must be in c.r. when riding in m.v. registered in state. $25-50 fine. Effective 9/1/83. Intro. by Rep. Schlueter and Sen. Parker. Passed Senate on voice vote, 1/26/83. Passed House Comm. with belt amend. for 3-4yr olds. Awaiting date for Floor vote. Session ends 5/30.
HB27	All children less than 4yrs old must be in c.r. when riding in m.v. owned/operated by parent/l.g. $25-50 fine, waivable. Effect. 9/1/83. Intro. by Rep. Hill. In Trans. Comm. Efforts being put toward SB6.
HB138	All children less than 5yrs old must be in c.r. when riding in m.v. owned/operated by resident parent/l.g. $25-50 fine, waivable. Eff. 9/1/83. Intro. by Rep. Wilson. In Trans. Comm. Efforts being put toward SB6.

CHILD RESTRAINT LAWS AND PENDING LEGISLATION AS OF - MAY 18, 1983



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Form 97

PROVINCE OF NOVA SCOTIA

DEPARTMENT OF HIGHWAYS

(INTER-DEPARTMENT CORRESPONDENCE)

Halifax, NS June 12 19 81
LOCATION AND DATE

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NAME POSITION ADDRESS

YOUR FILE	SUBJECT	H.O. FILE
	International Symposium on Occupant Restraint, Toronto, June 1 - 3, 1981	

I recently attended the International Symposium on Occupant Restraint in Toronto (program attached) which was sponsored by the American Association for Automotive Medicine, the Ministry of Transportation and Communications of Ontario, and the Ministry of Health of Ontario. The symposium covered the following topics:

1) Medical and Social perspectives of occupant restraint
2) Seat belt effectiveness
3) Mandatory seat belt laws and enforcement
4) Automatic restraints
5) Special needs of infants, children and the handicapped

The goal of this symposium was to assemble the knowledge currently available worldwide about motor vehicle occupant restraint.

The speakers list was truely international with speakers from Canada, United States, Australia, England, Sweden, West Germany, and France.

Dr. Robert Green (London, Ontario) president of the American Association for Automotive Medicine stated that "Highway related trauma is a medical problem that demands the interest and commitment of the physician community at all levels". Dr. Green also stated, "A substantial portion of this medical problem can be reduced by occupant restraint use".

The conclusions of Dr. Gordon Trinca (Melbourne, Australia) were confirmed by all other speakers at the symposium. Dr. Trinca stated "there is now undisputed evidence that"-

a) Seat belt restraint when properly worn remains the single most effective measure in protecting vehicle occupants from death and injury in road crashes.
b) Maximum benefit is achieved by a maximum wearing rate.
c) An acceptable high wearing rate can only be achieved by compulsory wearing laws backed by adequate enforcement, good promotion and readily available, safe, comfortable and easy to fit restraints.

The compulsory seat blet law was passed in the state of Victoria, Australia, in 1970 and seat belt wearing surveys over the past ten (10) years have indicated that the wearing rate for front seat occupants is between 80 and 90%. While the population and fuel consumptions have increased during the past ten (10) years, the number of motor vehicle occupants killed in the state of Victoria in 1980 was 44% below the projected trend line and those injured was 45% below the projected trend (see attached graphs).

In Sweden (seat belt restraints law in 1975) seat belt use from 1975 to present has been approximately 80% in the city areas and 90% in the rural areas. Mr. N.O. Bohlin of the Volvo Car Corporation, Sweden, indicated that "the Swedish motoring public has shown its full cooperation in the high belt usage - not only due to respect for the law, but also due to its edified confidence in the indisputable value of the safety belt".

The use of safety belts became mandatory in West Germany in 1976. The 1980 belt usage rates in Germany are: 80% on motorways, 65% on regular roads, and 45% within built up areas.

Seat belt usage bacame mandatory in France, July 1,1973. Prior to the enactment of the seat blet law, a public opinion poll was taken to determine public attutides towards seat belts. The result of the poll was:

- 81% of the public agreed that seat belts are a useful protection for the safety of motorists,
- 78% of the public were in favor of wearing seat belts,
- 79% of the public indicated that they would wear seat belts when driving on the highway if usage was mandatory.

The 1980 belt usage rate in France was 79% on rural highways.

The amendment to the Highway Traffic Act requiring the use of seat belts came into effect January 1, 1976, in Ontario. While belt usage by drivers was about 17% in 1975, the usage rate rose to 76% soon after the legislation took effect.

Enforcement of seat belt laws appears to be essential to a high seat belt usage rate. It has been determined that usage rate is directly related to the level of enforcement, with high usage rates usually associated with stringent enforcement. Although there are no mandatory seat belt laws in effect in the United States, several States have enacted laws requiring the use of approved child restraints and/or seat belts for children under five (5) years of age.

The argument that the mandatory use of seat belts is an infringement upon human rights, has been refuted by the following:

1) The belted driver who does not loose consciousness or is not thrown from his seat in an accident, will in many cases be able to control his vehicle to avoid danger to other road users.

2) Unrestrained occupants become dangerous projectiles.

3) Persons injured while not wearing seat belts occupy emergency equipment, which is usually in short supply.

4) The cost of treating the injury of unbelted vehicle occupants is borne by the general public through their tax dollars. Also, insurance settlements to persons disabled in motor vehicle accidents result in increased automobile insurance rates for all drivers.

A Justice of the Saskatchewan Supreme Court in a recent seat belt judgement stated "when we all pay for one anothers hospital and medical care, and other loss through taxes or insurance, we each have a right to say to a driver and to a passenger:'fasten your seat belts in my interest if not in your own.....'. What we have here is not a new interference with private rights, but the creation of a new public duty in the automobile age."

SUMMARY

A speaker from Australia stated "many of the major problems in the world are suffering, not from lack of solutions, but from lack of application of proven solutions".

All of the speakers at the symposium were of the opinion that there is undisputed world wide evidence that properly adjusted occupant restraint substantially reduces the chance of death or severe injury to motor vehicle occupants in highway accidents.

The experience of those countries now having seat belt laws has shown that an acceptable high wearing rate - 80 to 90% - can only be achieved by legislation and enforcement.

The results of attitudional studies in countries with seat blet laws, reveal that 60 to 80% of people interviewed prior to the enactment of the law indicated that they were in favour of mandatory seat belt usage.

K.R. O'Brien

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KRO'B:mir
attachments

Fig. 1
VEHICLE OCCUPANTS KILLED – VICTORIA

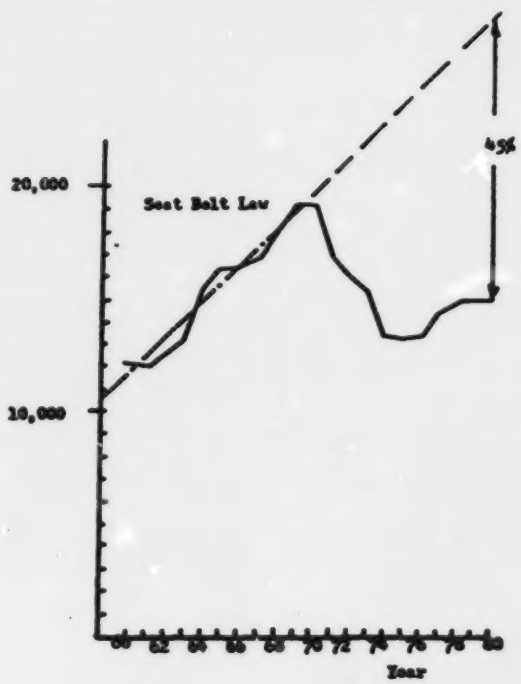


Fig. 2
VEHICLE OCCUPANTS INJURED – VICTORIA

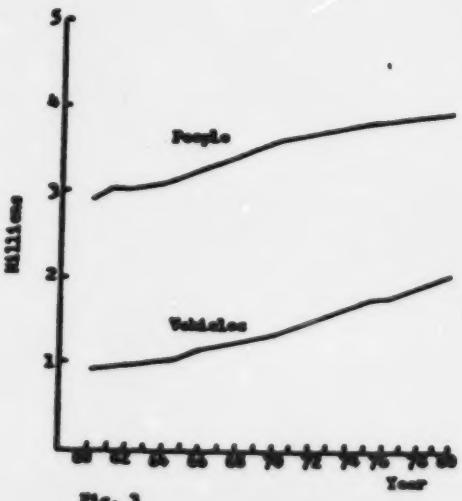


Fig. 3
POPULATION AND VEHICLES – VICTORIA

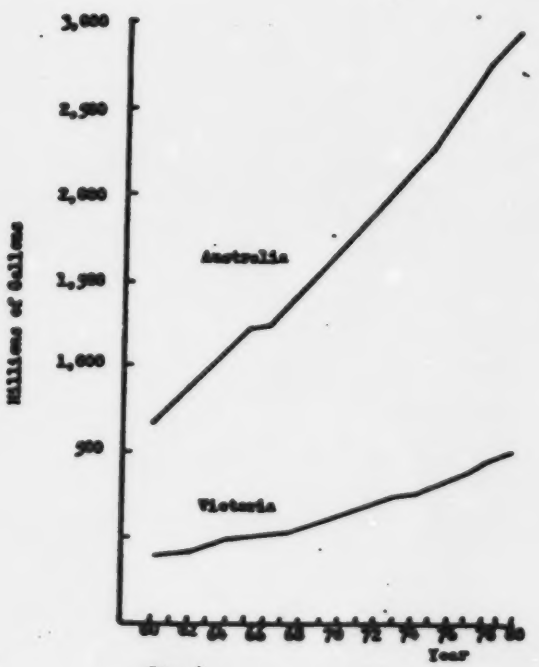


Fig. 4
PETROL CONSUMPTION

[redacted]

Seat Belt Legislation Presentation

THE CASE FOR SEAT BELTS

This document is intended to provide a brief overview of current information on seat belts. It covers what happens in automobile collisions, and the effects of seat belts, in addition to research findings on the effects of seat belt legislation. Seat belts offer levels of public safety and economic savings which are likely unsurpassed by any other single traffic safety measure. It is now clear that the only way to reap these benefits in full is to legislate their use.

HOW SEAT BELTS WORK

Well over a decade has passed since the first major study on seat belt effectiveness was conducted in Sweden. During that time, researchers have amassed copious evidence on seat belt effectiveness from laboratory studies and real accidents. Many jurisdictions throughout the world have implemented mandatory seat belt legislation. The results of all the evidence collected to date point to one significant conclusion, that properly worn belts are the single most effective means of reducing motor vehicle fatalities and injuries. No one other safety measure has been found to be as effective.

Inside the Car

The use of ultra-slow motion film from laboratory crash tests shows that two collisions actually occur in a motor vehicle accident: the collision between the car and another exterior hard surface such as a car, or a wall and that between the human body and the car interior. While walls and cars can be fixed or replaced, it is difficult or impossible to repair much of the damage and injury that occurs to the human body.

Imagine bumping your head on the car frame as you are getting in. It is quite painful. How fast were you going? You were probably moving less than 1 mile per hour. Imagine hitting your head on the windshield in an accident, going at only 25 miles per hour. Most people probably would not live to feel the pain. Severe injuries can occur at 15 mph. Unless they are restrained, people are moving against the car interior at the car's original rate of speed before impact. Injury is virtually guaranteed; death has a good chance of occurring. The events which occur in the Human Collision are pictured in Figure 1.

In fact, head injuries and internal injury to the chest, abdomen and pelvis are the most frequent causes of death in traffic accidents. These injuries account for 85% of all fatal injuries sustained in collisions.

Without seat belts, the human body ends up absorbing much of the accident force as it impacts with the car interior. The surfaces of the car interior are hard and unyielding compared to the human's fragile bones and organs. However, a body held in restraint can counteract the intense inertial forces. How the Human Collision is avoided is shown in Figure 2.

Ejection

A frequent event in many accidents is ejection. The unbelted body is thrown through a window, out an open door, or through the windshield. The body then strikes the hard pavement, or other hard objects outside the car. The force is usually sufficient to kill the individual as many motorcycle accidents indicate. If the body is lucky enough to survive the impact, it still risks being run over by other cars, or even crushed by its own vehicle. Some investigators have found that about 25% of all motor vehicle deaths were caused by ejection. Others have estimated that 80% of such deaths could have been prevented by using seat belts.

FIGURE 1

THE HUMAN COLLISION

0.000 seconds - car hits barrier

On impact, the car begins to crush and to slow down. The person inside the car has nothing to slow him down so he continues to move forward inside the car at 30 mph.

0.100 seconds - car stops

Within 1/10 of a second, the car has come to a complete stop. The person is still moving forward at 30 mph.

0.120 seconds - person hits car interior

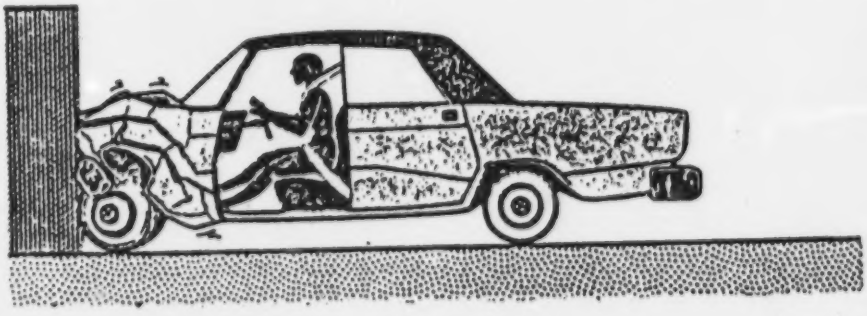
One-fiftieth of a second after the car has stopped, the person slams into the dashboard and windshield. This is the human collision. In the car's collision it takes 1/10 of a second to stop; in the human collision it takes only 1/100 of a second.

FIGURE 2

PREVENTING THE HUMAN COLLISION

On impact, the car begins to crush and to slow down.

As the car slows down, the person moves forward until the seat belts restrain him. The belts keep him in his seat and keep his head and chest from striking the car interior.



As part of the car, belted passengers are able to "ride down" the collision – to take advantage of the car's slower stop, as it crushes and absorbs energy. For belted passengers, there is no human collision.

EXHIBIT 1

NOVA SCOTIA RCMP
ACCIDENT REPORTS

VEHICLE HEADING WEST ON #4 HIGHWAY AT EAST MOUNT. VEHICLE WENT OUT OF CONTROL ON CURVE, TRAVELLED APPROXIMATELY 110 METERS, HITTING CULVERT AT EAST MOUNT ROAD, COLCHESTER CO., N.S.: TRAVELLING ANOTHER 25 METERS, OVERTURNING SEVERAL TIMES. DRIVER ONLY OCCUPANT OF THE VEHICLE, THROWN FROM IT AND VEHICLE LANDING ON DECEASED. NO WITNESSES TO THE ACCIDENT. VEHICLE ONLY HAD 200 KM. ON IT. SUSPECTED SPEED AND UNFAMILIARITY OF VEHICLE CAUSED ACCIDENT.

VEHICLE WAS PROCEEDING ON HIGHWAY 104 WHEN THE DRIVER LOST CONTROL, STRUCK GUARDRAIL, CROSSED THE HIGHWAY AND ROLLED IN THE DITCH. NO INDICATION OF LIQUOR. CROWN PROSECUTOR, MR. _____, ADVISED ALONG WITH MEDICAL EXAMINER, DR. SHEPHARD. NO AUTOPSY PERFORMED. IT IS BELIEVED SEAT BELTS WOULD HAVE PREVENTED SERIOUS INJURIES AND THE DEATH. [ONE DRIVER, TWO PASSENGERS INVOLVED]

SINGLE VEHICLE ACCIDENT - VEHICLE PROCEEDING 100 KM. PER HOUR TOWARDS HALIFAX ON 102 HIGHWAY IN MILFORD, N.S., WHEN DRIVER BECAME DROWSY AND CAR WENT OFF LEFT EDGE OF PAVEMENT DOWN INTO AND ACROSS MEDIAN, OVER-TURNED AND CAME TO REST ON ROOF AT EDGE OF PAVEMENT IN OPPOSITE LANE. DECEASED [PASSENGER] LOCATED BETWEEN ROOF OF CAR AND PAVEMENT. DOA AT V.G. HOSPITAL, HALIFAX, N.S. [DRIVER WEARING SEAT BELT; TWO PASSENGERS WITHOUT BELTS]

[IT WAS DETERMINED] THAT THE VEHICLE WAS WESTBOUND ON #1 HIGHWAY. THE VEHICLE WENT ONTO THE RIGHT SHOULDER OF THE ROADWAY AND WHEN THE DRIVER CORRECTED HIS STEERING, THE VEHICLE VEERED ACROSS THE ROADWAY, OVER THE DITCH AND OVERTURNING SEVERAL TIMES ON A LAWN. THE DECEASED WAS THROWN OUT OF THE VEHICLE AND DIED AS A RESULT OF A BROKEN NECK.

Seat belts thus work to prevent the human collision. They protect the individual from the hard, unyielding surfacts both inside and outside the car. Some examples of Nova Scotia's RCMP accident reports (Exhibit 1, opposite) show what happens in real accident situations without seat belts.

How Seat Belts Operate

Seat belts work to distribute the forces evenly throughout the body and to lessen their effect. They help to bring the body to a more gradual stop than would otherwise occur if the body rammed into an unyielding object. They prevent the body from hitting surfaces or objects which can penetrate or crush it. With a seat belt on, forces are centered on the pelvis and shoulders. These areas are stronger and better able to withstand shock than the skull or the rib cage. The cushioned car seat absorbs more of the forces as the body, restrained by the sealt belt, rebounds against it. All this can happen in less than 1 tenth of a second!

THE EVIDENCE FOR SEAT BELTS

Analysis of real life motor vehicle accidents has confirmed the results of controlled laboratory collision studies. Seat belts do save lives and prevent serious injuries from occurring.

A study by Volvo in Sweden of over 28,000 accident cases, found that no deaths occurred in crashes up to 60 m.p.h. when seat belts were worn. Without belts, death occurred even at 12 m.p.h.

A Canadian study showed that people wearing seat belts, can reduce the chance of death by more than 50 percent. In the U.S., it was found that death is 3½ times more likely to occur without a seat belt and serious injury 30% more likely to happen.

Australia, New Zealand, Sweden, Norway, Belgium, Finland and the Provinces of Ontario, British Columbia, Saskatchewan and Quebec are some of the jurisdictions throughout the world that have mandatory seat belt laws. Each one has reported major reductions in traffic fatalities and injuries following introduction of the law. The reductions range from 7% to over 50%. These results occurred even with less than 100% usage rates. The Canadian Department of Transport estimates that 6,000 lives can be saved if even 75% of all Canadians wear their seat belts in the next five years.

ECONOMIC FACTORS

Seat belts are protective devices which do save lives and prevent bodily harm. Each death and each serious injury that is avoided means not only less personal suffering but also less economic loss.

Likely less than 20% of Nova Scotia road users wear seat belts. In economic factors this helped to increase the total 1978 economic bill to Nova Scotians for the 19,667 accidents it experienced, to $76,653,607.

Sources of Costs

Where did the price tag of $76,653,607 come from? When people are injured or die in a car collision, certain activities and services have to be performed as a result of that accident. Each activity carries a price tag that must be paid by one or more individuals or segments of our society. The major sources of such costs are shown in Table 1, opposite.

Cost of Highway Accidents in Nova Scotia

In 1978, Nova Scotia's 19,667 accidents resulted in 4,520 injuries and 228 fatalities. The cost of property damage alone amounted to $16,356,607 for these accidents.

Each accident serious enough to cause injury ended up costing Nova Scotians $4,500. The average cost to the Province for each fatality in 1978 was a staggering $145,000. Average hospital care amounted to $1,000 for each person injured. The total cost to Government administration for all these accidents would be approximately $2,377,000 in 1978 dollars.

What did highway accidents in 1978 cost Nova Scotians? The total bill amounted to:

• *Property Damage*	*$ 16,356,607*
• *Hospital Care*	*4,520,000*
• *Societal Cost/Injuries*	*20,340,000*
• *Societal Cost/Fatalities*	*33,060,000*
• *Administrative Costs*	*2,377,000*
TOTAL	*$ 76,653,607*

Consider too, the incalculable human suffering associated with these deaths and injuries.

Savings to Nova Scotia with Mandatory Seat Belts

Of some 18 jurisdictions having mandatory seat belt laws, an average decrease of 25% in fatalities and a 23% reduction in injuries occurred following legislation.

In Nova Scotia, this means 57 deaths and 1,040 injuries would have been avoided.

The effects on Nova Scotia's economy would be savings, particularly in hospital care and societal costs. With a seat belt law, Nova Scotia could expect to pay:

• *Property Damage*	*$ 16,356,607*
• *Hospital Care*	*3,480,000*
• *Societal Costs/Injuries*	*15,660,000*
• *Societal Costs/Fatalities*	*24,795,000*
• *Administrative Costs (Assume 10% decrease)*	*2,139,300*
TOTAL	*$ 62,430,907*

THE SAVINGS TO NOVA SCOTIA WOULD BE: *$14,222,700*

In addition, personal suffering would be less.

The figure of $14,222,700 is probably on the conservative side, but it does represent the magnitude of tangible savings that can be achieved if motorists were to buckle up.

The number of fatalities and injuries in Nova Scotia will continue to rise as the number of licensed individuals and the number of miles driven increase, unless a seat belt law is introduced. Automobile insurance statistics indicate this has been happening steadily in Nova Scotia.

Accident benefit payments cover the insured, the dependents, and all other occupants of the vehicle, or pedestrians without establishing fault. Between 1974 and 1978, these payments rose by 75% in Nova Scotia. In Ontario, such payments increased by only 27% over the same period. They decreased by 4% in the year seat belt legislation was introduced.

Even though traffic accidents cost Nova Scotians over $76 million last year, the Province can expect to save approximately $14 million if seat belt wearing is made compulsory. Most of the economic savings will be medical. The great social saving will the the human tragedy and personal suffering that is prevented.

Every individual in Nova Scotia will benefit from the decision to wear seat belts.

LEGISLATION VERSUS VOLUNTARY COMPLIANCE

Despite the powerful benefits that result from wearing seat belts, the voluntary participation rate amongst road users has been low. Safety researchers have investigated other mechanisms and ideas to get people to buckle up voluntarily. These efforts have had little success in significantly increasing use. The only known way to achieve high

THE EFFECTS OF SEAT BELT LAWS THROUGHOUT THE WORLD

Country	Effective Date of Law	Belt Usage* Before Law Effective	Belt Usage After Law Effective	Occupant* Fatality Reduction	Occupant* Injury Reduction
Australia (all States)	1/1/69	25%	68%-85%	25%	20%
Belgium	6/1/75	-	92%	39%	24%
Ontario	1/1/76	17%	77%	17%	15%
Quebec	8/15/76	19%	64%	18%	-
Saskatchewan	1/7/77	19%	-	19.5%	9%
Finland	7/1/75	40%	71%	-	-
France	7/1/75	26%	85%	22%	32%
Israel	7/1/75	8%	80%	-	-
Netherlands	6/1/75	Rural: 28% Urban: 15%	Rural: 72% Urban: 53%	-	-
New Zealand	6/1/75	30%	62%-83%	10%	18%
Norway	9/1/75	Rural: 37% Urban: 15%	Rural: 61% Urban: 32%	-	-
Sweden	1/1/75	36%		46%	Serious injuries: 46% Moderate injuries: 36%

* Blanks indicate no information available

Source: Journal of Safety Research, National Safety Council, Volume 9, No. 2 (June, 1977).

rates of belt use has been through legislation. The fact is that most jurisdictions find that usage typically goes from about 20% prior to legislation to over 80% afterwards.

An example from Ontario typifies this problem. A $650,000 educational campaign ran for 18 months in the Province. Prior to the program, 15% of the driving population wore seat belts. After the campaign, it rose to 17.4%. The results were discouraging. After legislation was passed, surveys found an astounding increase in seat belt use.

About 80% of those in vehicles were observed to be wearing belts. The usage rate now hovers between 65% - 70%. The effects of legislation were far more successful than mere persuasion.

The impact that mandatory seat belt laws has had on traffic safety throughout the world is outlined in the table, opposite. The table demonstrates two significant points. The first shows how dramatically seat belt usage rises after legislation is passed. The second is the extent to which fatalities and injuries are reduced following legislation. The same kinds of results can be expeced in Nova Scotia.

Is a Seat Belt a Good Law?

Seat belt legislation throughout the world has been shown to significantly improve highway safety. Since it is the only way we know of to get high compliance rates, a jurisdiction could be severely criticized for not implementing the law. Governments concern themselves with all other aspects of transportation safety. Seat belts should be no exception, particularly as they are so effective.

The drop in traffic fatalities and injuries which follow legislation is usually significant enough to save a government millions of dollars. A law in Nova Scotia should result in savings of about $10 - $14 million, in the first year alone.

The impact of such savings are even greater when one considers that there is little or no cost involved in implementing a seat belt law, either for the individual or for the Government. Seat belts now come equipped in every new automobile manufactured or sold in Canada.

The costs of education campaigns or of special police enforcement programs are very minimal compared to the savings which will occur with legislation. Compared to other highway safety improvements such as roadway repairs, seat belts are truly a cost effective measure. The Government and its people pay little for the high level of safety and the economic savings which seat belts produce.

Can a Seat Belt Law Be Enforced?

Yes it can. Experience in other jurisdictions shows that it is easier to enforce than most regulations. This even more true as the number of cars manufactured before 1974 disappear from the roads.

1974 was the year that the inertia reel, combined shoulder and lap belt had to be installed in Canadian sold cars. Police are easily able to observe whether this type of seat belt is on.

Lap belts cannot be as easily observed from outside the car. However, motorists' attempts to buckle up after being stopped by police, are usually visible. Officers can check to see whether belts have been removed, buckled behind, or tied down.

Enforcement can be carried out in special spot check programs, or simply as part of the force's regular enforcement activities. In order to maintain high usage rates, the public must be made aware that seat belt offences will be charged. Seat belt convictions are seldom contested.

OPPOSITION TO SEAT BELTS AND MANDATORY LAWS

Despite the overwhelming evidence in their favour, seat belts are still opposed by many. Segments of the public sometimes oppose legislation. However, other jurisdictions who have passed the law have found that the opposition dies down shortly after. The Government of Nova Scotia should expect some criticism and opposition prior to and immediately following legislation. The public's reaction soon becomes favourable. once the first accident statistics reports indicate reduced fatalities.

Ontario encountered public opposition to the idea of seat belt legislation, both before and immediately after its law was finally passed. Nevertheless, 66 to 80% of motorists were found to be wearing restraints immediately following legislation. The criticism that had been so prominent began to subside only three months after legislation. The decrease coincided with the first press release showing the dramatic fall in fatalities compared to the previous year. The opposition appearing in the press and sent to Ontario's Transportation Department fell to a trickle within six months. Nowadays, it is rare to hear any strongly negative public reaction. More frequently heard is praise in favour of seat belt legislation.

Members of the Nova Scotia Parliament should be familiar with the answers to many of the public's arguments against seat belts which they will likely encounter in the future. Much of the criticism is derived from a lack of knowledge, or misunderstanding about:

- how seat belts work
- their benefits
- personal freedom

We have summarized the responses to this criticism into the three areas listed.

1. How Seat Belts Work

- Humans are unable to brace themselves against car interiors, and are unable to hold onto children at accident speeds even as low at 10 kph. Seat belts, by their special construction, restrain the body, providing the bracing action which humans cannot produce.

- They are needed at all times for both slow and high speeds. This includes going around the corner and on long trips.

- Seat belts are worth the trouble to put on every time the car is used. The statistics prove it.

2. Their Benefits

- They provide more protection to all motorists and passengers, including both good and bad drivers. Wearing belts prepares road users for any accident situation.

- They prevent people from incurring head injuries and in turn prevent unconsciousness. When you are conscious you can escape from a burning or sinking car or any other hazardous situation.

- They keep the vehicle occupants within the protective shell of the car, preventing ejection - an event which usually results in death.

3. Personal Freedom

- Mandatory seat belt laws protect human life and prevent human suffering and save money. The decision to wear a seat belt affects not only the individual, but his/her family, government and society. All of society benefits whenever a highway fatality is prevented by seat belts.

- Responsible governments are ones that implement seat belt legislation. The same governments are concerned about all other aspects of transportation safety too.

INTERIM REPORT

MINISTER'S COMMITTEE ON HIGHWAY SAFETY

August, 1979

(Introduction and Report of Engineering Subcommittee)

INTRODUCTION

(INTERIM REPORT)

(MINISTER'S COMMITTEE ON HIGHWAY SAFETY)

In March of 1979, the Honourable Thomas J. McInnis, Minister of Highways, struck the Minister's Committee on Highway Safety.

The Committee was formed because of the Minister's great concern with the extensive human suffering and economic loss caused by motor vehicle accidents in the Province.

The mandate of this Committee was to investigate the sources of this suffering and loss and make recommendations to the Minister for their reduction. From that point, the Committee was given the privilege of defining its own mode of operation and its own discretion in selecting what the appropriate remedies might be.

The Minister's Committee on Highway Safety represents a cross section of interested and concerned Nova Scotians. Most members of the Committee were selected by organizations who were asked to contribute a representative. The one thing they all have in common is a deep concern for their fellow man.

All of these people have expressed their concern by working very hard. Each of them has spent many, many hours and has contributed their personal and professional talents unstintingly and without reservation. The budget provided the Committee with a token honorarium only and my appreciation of their efforts is beyond words.

After initial discussion, it was determined that the Committee as a Whole was too large a group to efficiently handle the vast amount of material that was available and that had to be considered. The result, the following subcommittees were formed:

1. Public Consultation
2. Data Evaluation
3. Legislation
4. Medical
5. Education
6. Motorcycle
7. Engineering

Each Committee member was assigned to a subcommittee and each subcommittee appointed a Chairman. The subcommittees then deliberated on their areas of concern and reported back to the Committee of the Whole. It became increasingly clear as the Committee continued its deliberations that while there were any

number of steps that might be taken to reduce accidents there were only a half dozen that, in terms of practicality and cost effectiveness, had any great potential. These were seat belts, the enforcement of speed limits, the reduction of the number of impaired operators of motor vehicles on our highways, improved driver education and improved emergency services. The subcommittes reports which form the body of this Report are concentrated on these topics.

The Committee is of the opinion that, as a basic principal, it is a privilege to have an operator's license and to drive a motor vehicle on public highways. We believe that attendant upon that privilege are certain duties to the society which has provided that privilege and that the society may require those who have forfeited the privilege to comply with certain laws for the benefit of each member and the society as a whole.

Specific mention must be made in this Introduction of the issue of the mandatory wearing of seat belts. The Committee is of the opinion for reasons expressed in the appendices of this Report and in its conclusion that the mandatory wearing of seat belts is the simplest, most practical and most cost effective way of reducing the great personal and economic loss of motor vehicle accidents. The question is, however, sufficiently complex and sufficiently contentious that the Committee wishes to present a more detailed brief and consult with other interested parties. This brief would form a major part of the final Report of the Committee due at the end of this year.

This, our Interim Report, represents the informed opinion, arrived at only after great effort and deliberation, of a particularly dedicated group of Nova Scotians, I am convinced that the Report's Recommendations are solid and reasonable and are deserving of the greatest consideration of the Government and the people of the Province of Nova Scotia.

Respectfully submitted,

J. Walter Thompson
Chairman

ENGINEERING SUBCOMMITTEE

APPENDIX "D"

The availability of convenient, inexpensive, high-energy liquid fuels during the last half-century has enabled mass production and profligate use of relatively crude vehicles and inefficient power plants. The boom years of the past three decades have enabled virtually the entire population to have, and expect to maintain, personal vehicular transportation.

It is important to emphasize the enormous role that automotive transportation plays in Canada and the United States. Approximately one of every six persons employed is associated directly or indirectly with the automotive industry. Highway deaths and injuries easily outrank all other sources of casualties sustained by the population, including wars, aircraft accidents, mining disasters, drownings, etc.

The facts that these deaths and injuries are not only accepted, expected, predictable with considerable accuracy, and to a large measure, preventable, constitute a social indictment of the entire community.

CAUSAL FACTORS AFFECTING AN ACCIDENT

In order to assess the degree to which automotive accidents can be reduced, it is important to establish which of the human, vehicular and environmental elements influence accident causation (see Figure 1 from Reference 1*).

Responsibility for operational control of these factors fall within five categories:

1. The human (driver) in control of the vehicle.
2. The vehicle designer-manufacturer.
3. The road designer-constructor, including traffic.
4. The vehicle-maintenance organization.
5. The road maintenance organization.

Ideally, if all of these factors were in control in specific situations, accidents would seldom if ever occur.

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* Reference (1) "An Improved Causal Factor Recording Procedure", Miller, Baird and Doiron Vehicle Safety Research Team, 1977

It is quite obvious that a host of preventative measures could be employed to reduce the frequency and severity of accidents The extent to which these preventative measures are employed is determined largely by economic and human limitations.

The legal jurisdiction for item (2) only falls within Federal control, by virtue of vehicular standards. All others are governed, to some extent, by provincial legislation. Specifically, for example, the driver is subject to demonstrating his/her ability to drive by passing a driving examination, is restricted to driving while not impaired, is restricted to driving a vehicle that is mechanically sound, is restricted to obeying speed limits and other traffic control devices. The ultimate responsibility in a given situation, of course, remains with the individual; however, the province is responsible for enforcing the restrictive legislation.

CRASH SEVERITY REDUCTION

There are measures which can be taken to reduce the severity of an accident, given that one has occurred. These are:

1. Passenger protection through provision of appropriate vehicle and restraint systems designs.
2. Absence of post-crash road hazards.
3. Prompt and effective rescue and medical assistance.
4. Use of passenger restraint systems.

Here again the responsibility is divided between the Federal Government (items 2, 3 and 4) and the individual (item 4). In recent years, the Federal Government has been conducting various types of investigations on automotive safety design features, leading to standards legislation on automotive safety design and manufacture injury reduction factors in vehicles (item 1). This is a very satisfactory programme and is continuing.

Post-crash road hazards (item 2) fall clearly within the provincial jurisdiction. Occupants in a vehicle out of control (immediately following an initial impact, for example) are often subjected to severe injuries upon a secondary collision with roadside rocks. In Nova Scotia in particular, the ubiquitous presence of rocks and rolling terrain presents a cost-effectiveness economic balance program which is largely absent in many other parts of Canada.

Prompt and effective rescue and medical assistance (item 3) also clearly fall within the provincial jurisdiction, and are of extreme importance in reducing post-crash injury severity. These aspects are the subject of another section of the general Report.

The use of passenger restraint systems presents a particular problem. Although the primary responsibility of the use of active restraints (in particular, seat belts) must be with the individual,

it is the strong conviction of the Subcommittee that appropriate Provincial legislation on this issue must be enacted and enforced. This topic will be discussed in more detail below.

ROLE OF THE SUBCOMMITTEE ON ENGINEERING

The role of the Subcommittee on Engineering with the structure of the Minister's Committee on Highway Safety, is less well defined than that of the other subcommittees.

The overall immediate objective of the full Committee are outlined in detail elsewhere in the Committee's Report. These include (in order of general priority):

1. Impaired driving,
2. Speed related accidents,
3. Passenger restraints,
4. Driver education,
5. Ambulance and rescue services.

Items 1, 2, 4 and 5 fall logically within the activities of appropriatly defined subcommittees, and it was the general consensus that the Engineering Subcommittee concentrate on passenger restraint systems as its immediate evaluation goal.

There are, however, several other activities which this Subcommittee deems significant in relation to highway safety. Among these are:

1. Long-range planning on the effects of the energy supply situation in respect to downsizing of vehicles, altered vehicle designs, lower specific power engines, introduction of hybrid fuels, on-board microcomputers and introduction of electric and/or hybrid-drive vehicles.

2. Investigation into the excessive proportion of single vehicle accidents which occur in Nova Scotia.

3. Evaluation of roadside hazards (e.g. rocks, ditches) and roadside protective devices (e.g. barriers, abutments).

4. Evaluation of safety check effectiveness.

5. Investigation of qualities of motorcycle helmets.

6. Evaluation of modern technological software and hardware to highway driving (e.g. improved lighting, vehicle-spacing radar, condition-controlled speed limit signs).

At this time, however, this Subcommittee Report will be limited to passenger restraint systems.

PASSENGER RESTRAINT SYSTEMS ("SEAT BELTS")

The basic contents of the Subcommittee's Report on restraint systems can be outlined in two statements and six recommendations. The statements are:

1. The members of this Subcommittee are firmly convinced that passenger restraint systems save lives and reduce injury severity in motor vehicle accidents.

2. Modern restraint systems, while being far from perfect are quite effective when properly used.

The recommendations are:

1. That appropriate restraint system legislation be introduced in the legislature at the earliest opportunity, subject to timing, educational and utilitarian constraints such as outlined below.

2. That the legislation, assuming its passage, be enacted as soon as the enforcement machinery is established.

3. Prior to the introduction of legislation, the enormous available literature resource be carefully correlated into a concise, realistic, factual information "package."

4. Prior to the introduction of legislation, that the information package be used to inform the MLAs and subsequently the general public, of the advantages of seat belt use and legislation to the individual and to the Province.

5. That the educational campaign be continued for some time after legislation has been enacted, to enhance the initial campaign, to reinforce the legislation and to inform the public of the proper use of restraints.

6. That child restraint systems be definitely included in the educational, legislative and enforcement aspects of restraint systems.

RESTRAINT SYSTEMS EFFECTIVENESS

The passenger restraint systems currently in use consist of the following:

1. Lap and single-shoulder belting system for driver and front right passenger, inertia latching system,

2. Lap belt only for rear-seat passenger and front central passenger (if seating available), for most North American produced vehicles,

or,

Lap and single-shoulder belting system for the two outside rear passenger and rear central lap belt only (if seating available) for many European produced vehicles,

3. Child restraint systems consisting of forward or rearward facing sub-seats of many designs, suitable for children of varying age and weight groups; these restraints typically utilized the fitted adult belting, plus one or more additional fixtures to secure the child container. Typically, these child restraint systems are not fitted as original equipment by the manufacturer.

It should be noted that restraint systems must conform to Federal safety standards in both design and installation by the vehicle manufacturers. Seat belt designs are being continuously upgraded, improvements occurring in both effectiveness and convenience.

No seat belt can be effective if it is not used.

No seat belt can be fully effective if it is not properly fastened and adjusted.

Data collected by the Federal Department of Transport in Canada and its equivalent in other countries clearly indicate that seat belts are effective, do save lives and do reduce injury severity.

Many tens of thousands of words and dozens of reports have been written on seat belt effectiveness. It would be redundant to quote all, or even a few of these reports here. For the present purposes, an appropriate recent release by Transport Canada serves to well illustrate the situation. This is quoted below:

"FACTS ON SEAT BELT EFFECTIVENESS IN CANADA"

"Approximately 90 percent of the 3,200 car drivers and passengers killed in traffic accidents last year were not wearing seat belts. If these people had been wearing lap and shoulder belts, we estimate that 55 percent or 1,600 lives would have been saved. The four Provinces with seat belt laws and the dates of introduction are as follows:

Ontario	January 1976
Quebec	August 1976
Saskatchewan	July 1977
British Columbia	October 1977

In the year following introduction of the seat belt law, and reduced speed limits in Ontario, 17 percent reduction in fatalities and a 13.7 percent decrease in injuries were recorded. Savings primarily attributed to seat belts.

In addition to saving lives, seat belts reduce the seriousness of an injury. Average medical care cost is $228.00 for those wearing a seat belt and $419.00 for those not wearing a seat belt. Ontario is saving $2,000,000. annually on medical costs for traffic accidents. Saskatchewan recorded a 19.5 percent decrease in fatalities and a 9 percent reduction in injuries in the year following introduction of the law. These savings were made in spite of a 10 percent increase in accidents. In comparison, Ontario's accident rate increased by 3 percent. Quebec and British Columbia have not issued any statement of seat belt effectiveness. However, our records indicate that the fatality rate in British Columbia is down 12 percent and 7 percent in Quebec."

SUGGESTED SEAT BELT IMPROVEMENTS

While current seat belt designs are effective, there is considerable room for design improvements. Although the design of seat belts is not a provincial government legislative concern, the design aspects must be considered by provincial authorities when considering legislation and subsequent enforcement of seat belt use, for the following two reasons:

1. Seat belt design is an evolutionary process, and any legislation passed should ideally anticipate design improvements to avoid unnecessary and perhaps conflicting legislative amendments, and

2. Provincial input to the Federal standards group, outlining aspects of desired design improvements, would not only be welcomed but would also assist in hastening their consideration, testing and adoption.

The most common complaints by seat belt users in respect to design are:

1. Fear of a perceived difficulty in releasing the seat belt latch in case of fire or immersion in water. Latch mechanisms are not standardized in respect to design, although they all must meet certain strength, operational and reliability criteria. A standardized, single-motion, single-handed

squeeze-pull arrangement could readily be designed to meet all safety criteria and still be reassuringly easy to unlatch with a natural hand-arm motion.

2. The typical location of the seat belt mounting points on the vehicle frame are dictated by the dimensions of the "standard average driver." This fact, coupled with independent seat adjustments (adjustable relative to vehicle controls), lead to abdominal rather than lap restraint and uncomfortable shoulder strap interference with the neck. Alternative arrangements can and should be developed and evaluated.

3. The actual belting materials used meet the safety standards of adequate strength, controlled stretch and durability as required. However, many people find that the belt edges chafe their necks. This problem could be alleviated by advanced design as advocated in (2) above.

4. There is inadequate indication to the wearer of excessive seat belt slackness in those vehicles fitted with frame-fitted lock-up mechanisms. Other belt designs, with no provision for slackness adjustments, maintain an uncomfortable belt pressure on the wearer. Improved designs are highly desirable.

Any passenger restraint legislation should provide for the acceptance of suitable air bags and other passive restraint systems.

Significant improvements in restraint systems effectiveness can be made at the expense of cost and perhaps convenience. Double shoulder harnesses, patterned after aircraft pilots' and race car drivers' restraints are considerably more effective than a single shoulder harness. They are also more expensive. Hybrid belt and inflatable bag arrangements have been tested and appear to have advantages over either the belt or bag system alone. Further discussion on this topic is beyond the scope of this Report.

SEAT BELT CAMPAIGN

The basic procedure respectfully suggested for the implementation of more effective seat belt usage in Nova Scotia is essentially outlined in the six recommendations of the Report, on page 28 Auxiliary recommendations, directed specifically to methodology, are noted below:

1. That a coordinator and/or coordinating committee be established to
   (a) correlate the wealth of available data, films, posters, pamphlets, etc.

(b) organize an appropriate campaign,
(c) organize an evaluation of the effectiveness of the campaign,
(d) organize an appropriate follow-up campaign to ensure continuity of effort.

2. That advantage be taken of the colour production originals of Transport Canada posters, pamphlets, films, video tapes, etc. Officials of Transport Canada have verbally noted, that although that Organization is no longer producing and distributing literature, the plates are availalbe for legitimate provincial purposes, as originally prepared or with suitable caption changes.

3. That the Report, "How to Conduct a Seat Belt Campaign", prepared by a consulting firm for Transport Canada, be examined in detail and utilized where appropriate. (This publication is relatively new and has not been evaluated or revised; feedback on its effectiveness would be appreciated.) In this Subcommittee's opinion, this Report contains some excellent reference material as well as film, slide, video tape and literature bibliographies.

4. That Mr. Carl Shiels, Director of Highway Safety, Province of Saskatchewan, be invited to Halifax for discussions with the Minister and appropriate members of the Committee. Mr. Shiels is known and very highly respected by this Subcommittee's Chairman. The Saskatchewan seat belt campaign was exceptionally well planned, well executed and eminently successful. It may well be possible to procure some of the excellent illustrative material prepared and used by Saskatchewan.

5. That as many units as feasible of the "Convincer" be utilized in the campaign. The "Convincer" is aptly named, being a simulated car seat fitted with a seat belt harness. The test subject, preferably a "doubter", is (safely) subjected to the equivalent of a barrier collision at approximately 10 km/h.

6. That adequate personnel and financial resource be made available for the campaign.

FIGURE 1

ENVIRONMENT
(CELL #7)
ROAD DESIGN
ROAD HAZARDS
WEATHER
TRAFFIC
VEHICLE DYNAMICS
VEHICLE DESIGN
MAINTE-NANCE
VEHICLE CONTROLS
VEHICLE
CRASH
ACTION
DECI-SION
PER-CEPTION
COMPRE-HENSION
EXPERIENCE
RISK-TAKING BE-HAVIOR
PRE-OCCUPATION
PHYSIO-LOGICAL STATE
MENTAL STATE
HUMAN
(CELL #1)

INTERIM REPORT

MINISTER'S COMMITTEE ON HIGHWAY SAFETY

August, 1979

(Introduction and Report of Engineering Subcommittee)

SEATBELTS

Seatbelts remain a preoccupation of the Committee. We acknowledge that there are a large number of Nova Scotians who are opposed to our recommendation to require seatbelt wearing in motor vehicles. While some people refuse to accept the proposition that seatbelts are effective, the major opposition comes from those who regard our recommendation as an afront to their personal dignity and freedom.

We would respectfully suggest, however, that such an arguement cannot be sustained with regard to our young people. While it may be argued that the state has no right to interfere with the adult individual, the state clearly does have a duty to protect its children and has taken steps in many ways over a long period of time to protect our children both from themselves and from others who may injure or exploit them.

We therefore recommend that the driver of a motor vehicle be required by law to ensure that all persons who have not reached the age of majority, i.e. 19 years of age, are secured in an appropriate restraint devise. Drivers under the age of 19 would also be required to wear seatbelts.

The case for seatbelts remains and we have included in this report, with some revisions and deletions, a presentation on seatbelts prepared by Peat, Marwick for the Department of Transportation prior to the establishment of the Committee.

THE CASE FOR SEATBELTS

This document is intended to provide a brief overview of current information on seatbelts. It covers what happens in automobile collisions, and the effects of seat belts, in addition to research findings on the effects of seatbelt legislation. Seatbelts offer levels of public safety and economic savings which are likely unsurpassed by any other single traffic safety measure. It is now clear that the only way to reap these benefits in full is to legislation their use.

HOW SEATBELTS WORK

Well over a decade has passed since the first major study on seatbelt effectiveness was conducted in Sweden. During that time, researchers have amassed copious evidence on seatbelt effectiveness from laboratory studies and real accidents. Many jurisdictions throughout the world have implemented mandatory seatbelt legislation. The results of all the evidence collected to date point to one significant conclusion, that properly worn belts are the single most effective means of reducing motor vehicle fatalities and injuries. No one other safety measure has been found to be as effective.

INSIDE THE CAR

The use of ultra-slow motion film from laboratory crash tests show that two collisions actually occur in a motor vehicle accident; the collision between the car and another exterior hard surface such as a car, or a wall and that between the human body and the car interior. While walls and cars can be fixed or replaced, it is difficult or impossible to repair much of the damage and injury that occurs to the human body.

Imagine bumping your head on the car frame as you are getting in. It is quite painful. How fast were you going? You were probably moving less than 1 mile per hour. Imagine hitting your head on the windshield in an accident, going at only 25 miles per hour. Most people probably would not live to feel the pain. Severe injuries can occur at 15 mph. Unless they are restrained, people are moving against the car interior at the car's original rate of speed before impact. Injury is virtually guaranteed; death has a good chance of occurring. The events which occur in the Human Collision are pictured in Appendix 3-a.

In fact, head injuries and internal injury to the chest, abdomen and pelvis are the most frequent causes of death in traffic accidents. These injuries account for 85% of all fatal injuries sustained in collisions.

Without seatbelts, the human body ends up absorbing much of the accident force as it impacts with the car interior. The surfaces of the car interior are hard and unyielding compared to the human's fragile bones and organs. However, a body held in restraint can counteract the intense inertial forces. How the Human Collision is avoided is shown in Appendix 3-b.

EJECTION

A frequent event in many accidents is ejection. The unbelted body is thrown through a window, out an open door, or through the windshield. The body then strikes the hard pavement, or other hard objects outside the car. The force is usually sufficient to kill the individual as many motorcycle accidents indicate. If the body is lucky enough to survive the impact, it still risks being run over by other cars, or even crushed by its own vehicle. Some investigators have found that about 25% of all motor vehicle deaths were caused by ejection. Others have estimated that 80% of such deaths could have been prevented by using seatbelts.

Seatbelts thus work to prevent the human collision. They protect the individual from the hard, unyielding surfaces both inside and outside the car. Some examples of Nova Scotia's RCMP accident reports (Appendix 1) show what happens in real accident situations without seatbelts.

HOW SEATBELTS OPERATE

Seatbelts work to distribute the forces evenly throughout the body and to lessen their effect. They help to bring the body to a more gradual stop than would otherwise occur if the body rammed into an unyielding object. They prevent the body from hitting surfaces or objects which can penetrate or crush it. With a seatbelt on, forces are centered on the pelvis and shoulders. These areas are stronger and better able to withstand shock than the skull or the rib cage. The cushioned car seat absorbs more of the forces as the body, restrained by the seatbelt, rebounds against it. All this can happen in less than 1

tenth of a second!

THE EVIDENCE FOR SEATBELTS

Analysis of real life motor vehicle accidents has confirmed the results of controlled laboratory collision studies. Seatbelts do save lives and prevent serious injuries from occurring.

A study by Volvo in Sweden of over 28,000 accident cases, found that no deaths occurred in crashes up to 60 mph when seatbelts were worn. Without belts, death occurred even at 12 mph.

A Canadian study showed that people wearing seatbelts, can reduce the chance of death by more than 50%. In the U.S.A., it was found that death is 3½ times more likely to occur without a seatbelt and serious injury 30% more likely to happen.

Australia, Sweden, Norway, Belgium, Finland and the provinces of Ontario, British Columbia, Saskatchewan and Quebec are some of the jurisdictions throughout the world that have mandatory seatbelt laws. Each one has reported major reductions in traffic fatalities and injuries following introduction of the law. The reductions range from 7% to over 50%. These results occurred even with less than 100% usage rates. The Canadian Department of Transport estimates that 6,000 lives can be saved if even 75% or all Canadians wear their seatbelts in the next five years.

ECONOMIC FACTORS

Seatbelts are protective devices which do save lives and prevent bodily harm. Each death and each serious injury that is avoided means not only less personal suffering but also less economic loss.

A study by Eugene Dagnone, M.D., of the Department of Surgery at Queens University, and Dr. Oswald Siu of the Department of Community Health and Epidemoiogy of Queens University in a study of 3,361 victums of motor vehicle accidents in southeastern Ontario found "an impressive proportion" of requirements for medical and rehabilitation

services was reduced by seatbelt use.

Such a reduction clearly translates itself into financial savings.

A proclaimed and properly enforced seatbelt law will save the province money.

LEGISLATION VERSUS VOLUNTARY COMPLIANCE

Despite the powerful benefits that result from wearing seatbelts, the voluntary participation rate amongst road users has been low. Safety researchers have investigated other mechanisms and ideas to get people to buckle-up voluntarily. These efforts have had little success in significantly increasing use. The only known way to achieve high rates of belt use has been through legislation. The fact is that most jurisdictions find that usage typically goes from about 20% prior to legislation to over 80% afterwards.

An example from Ontario typifies this problem. A $650,000 educational campaign ran for 18 months in the province. Prior to the program, 15% of the driving population wore seatbelts. After the campaign, it rose to 17.4%. The results were discouraging. After legislation was passed, surveys found as astounding increase in seat belt use.

About 80% of those in vehicles were observed to be wearing belts. The usage rate now hovers between 65% - 70%. The effects of legislation were far more successful than mere persuasion.

The impact that mandatory seatbelt laws has had on traffic safety throughout the world is outlined in the appended table. The table demonstrates two significant points. The first shows how dramatically seatbelt usage rises after legislation is passed. The second is the extent to which fatalities and injuries are reduced following legislation. The same kinds of results can be expected in Nova Scotia.

IS A SEATBELT A GOOD LAW?

Seatbelt legislation throughout the world has been shown to significantly improve highway safety. Since it is the only way we know of to get high compliance rates, a jurisdiction could be severely criticized for not implementing the law. Governments concern themselves with all other aspects of transportation safety. Seatbelts should be of no exception, particularly as they are so effective.

The drop in traffic fatalities and injuries which follow legislation is usually significant enough to save a government millions of dollars.

The impact of such savings are even greater when one considers that there is little or no cost involved in implementing a seatbelt law, either for the individual or for the Government. Seatbelts now come equipped in every new automobile manufacturer or sold in Canada.

The costs of education campaigns or of special police enforcement programs are very minimal compared to the savings which will occur with legislation. Compared to other highway safety improvements such as roadway repairs, seatbelts ar truly a cost effective measure. The Government and its people pay little for the high level of safety and the economic savings which seatbelts produce.

CAN A SEATBELT LAW BE ENFORCED?

Yes it can. Experience in other jurisdictions shows that it is easier to enforce than most regulations. This even more true as the number of cars manufactured before 1974 disappears from the roads.

1974 was the year that the inertia reel, combined shoulder and lap belt had to be installed in Canadian sold cars. Police are easily able to observe whether this type of seatbelt is on.

Lap belts cannot be as easily observed from outside the

the car. However, motorists' attempts to buckle-up after being stopped by police, are usually visible. Officers can check to see whether belts have been removed, buckled behind, or tied down.

Enforcement can be carried out in special spot check programs, or simply as part of the force's regular enforcement activities. In order to maintain high usage rates, the public must be made aware that seatbelt offences will be charged. Seatbelt convictions are seldom contested.

It is very important that there be a public relations preparation for the proclamation of seatbelt law, and that the police be prepared to carry out an on-going, thorough enforcement plan. The impact of the law will be seriously diluted if the population perceives that the police are not about to enforce the law. If, on the other hand, people believe from the very beginning that the law is to be systematically enforced by all police departments in the province, then the wearing rate will be high. It is essential that the active cooperation of the police forces through-out the province be enlisted before the program begins.

OPPOSITION TO SEATBELTS AND MANDATORY LAWS

Despite the overwhelming evidence in their favour, seatbelts are still opposed to by many. Segments of the public sometimes oppose legislation. However, other jurisdictions who have passed the law have found that the opposition dies down shortly after. The Government of Nova Scotia should expect some criticism and opposition prior to and immediately following legislation. The public's reaction soom becomes favourable, once the first accident statistic reports indicate reduced fatalities.

Ontario encountered public opposition to the idea of seatbelt legislation, both before and immediately after its law was finally passed. Nevertheless, 66 to 80% of motorists were found to be wearing restraints immediately following legislation. The criticism that had been so prominent began to subside only three months after legislation.

The decrease coincided with the first press release showing the dramatic fall in fatalities compared to the previous year. The opposition appearing in the press and sent to Ontario's Transportation Department fell to a trickle within six months. Nowadays, it is rare to hear any strongly negative public reaction. More frequently heard is praise in favour of seatbelt legislation.

Much of the critism is derived from a lack of knowledge, or misunderstanding about:

--How Seatbelts Work
--Their Benefits
--Personal Freedom

We have summarized the responses to this criticism into the three areas listed.

1. How Seatbelts Work. Humans are unable to brace themselves against car interiors, and are unable to hold onto children at accident speeds even as low as 10 kph. Seatbelts, by their special construction, restrain the body, providing the bracing action which humans cannot produce.

They are needed at all times for both slow and high speeds. This includes going around the corner and on long trips.

Seatbelts are worth the trouble to put on every time the car is used. The statistics prove it.

2. Their Benefits. They provide more protection to all motorists and passengers, including both good and bad drivers. Wearing seatbelts prepares road users for any accident situation.

They prevent people from incurring head injuries and in turn prevent unconsciousness. When you are conscious you can escape from a burning or sinking car or any other hazardous situation.

They keep th vehicle occupants within the protective shell of the car, preventing ejection--an event which usually results in death.

3. Personal Freedom. Mandatory seatbelt laws protect human life and prevent human suffering and save money. The decision to wear a seatbelt

affects not only the individual, but his/her family, government and society. All of society benefits whenever a highway fatality is prevented by seatbelts.

In all cases the freedom of the individual must be weighed against the interest that the society as a whole has in an issue. In this case the individual's inconvenience in buckling up must be compared to the social costs of the failure to wear seatbelts. The inconvenience of wearing a seatbelt is minor; the social costs of not wearing seatbelts in motor vehicle accidents are great.

NOVA SCOTIA RCMP ACCIDENT REPORTS APPENDIX 1

VEHICLE HEADING WEST ON #4 HIGHWAY AT EAST MOUNT. VEHICLE WENT OUT OF CONTROL ON CURVE, TRAVELLED APPROXIMATELY 100 METRES, HITTING CULVERT AT EAST MOUNT ROAD, COLCHESTER CO., N.S.: TRAVELLING ANOTHER 25 METERS, OVERTURNING SEVERAL TIMES. DRIVER ONLY OCCUPANT OF VEHICLE, THROWN FROM IT AND VEHICLE LANDING ON DECEASED. NO WITNESSES TO THE ACCIDENT. VEHICLE ONLY HAD 200 KM. ON IT. SUSPECTED SPEED AND UNFAMILIARITY OF VEHICLE CAUSED ACCIDENT.

VEHICLE WAS PROCEEDING ON HIGHWAY 104 WHEN THE DRIVER LOST CONTROL, STRUCK GUARDRAIL, CROSSED THE HIGHWAY AND ROLLED IN THE DITCH. NO INDICATION OF LIQUOR. CROWN PROSECUTOR, MR. ____, ADVISED ALONG WITH MEDICAL EXAMINER, DR. SHEPARD. NO AUTOPSY PERFORMED. IT IS BELIEVED SEATBELTS WOULD HAVE PREVENTED SERIOUS INJURIES AND THE DEATH. ONE DRIVER, TWO PASSENGERS INVOLVED.

SINGLE VEHICLE ACCIDENT - VEHICLE PROCEEDING 100 KM. PER HOUR TOWARDS HALIFAX ON 102 HIGHWAY IN MILFORD, NS, WHEN DRIVER BECAME DROWSY AND CAR WENT OFF LEFT EDGE OF PAVEMENT DOWN INTO AND ACROSS MEDIAN, OVERTURNED AND CAME TO REST ON ROOF AT EDGE OF PAVEMENT IN OPPOSITE LANE. DECEASED PASSENGER LOCATED BETWEEN ROOF OF CAR AND PAVEMENT. DOA AT V.G. HOSPITAL, HALIFAX, NS. DRIVER WEARING SEATBELT: TWO PASSENGERS WITHOUT BELTS.

IT WAS DETERMINED, THAT THE VEHICLE WAS WESTBOUND ON #1 HIGHWAY. THE VEHICLE WENT ONTO THE RIGHT SHOULDER OF THE ROADWAY AND WHEN THE DRIVER CORRECTED HIS STEERING, THE VEHICLE VEERED ACROSS THE ROADWAY, OVER THE DITCH AND OVERTURNING SEVERAL TIMES ON A LAWN. THE DECEASED WAS THROWN OUT OF THE VEHICLE AND DIED AS A RESULT OF A BROKEN NECK.

COSTS ARISING FROM EACH CAR ACCIDENT

APPENDIX 2

To the Individual and the Family	• Hospital Services • Prescriptions, Therapy • Lost Wages • Funeral Services • Ambulance Service • Tow Truck Service • Vehicle Repairs or a New Car
To Governments - Local, Provincial and Federal	• Police Investigation • Medical Investigation • Medical Fees • Lost Tax Revenues • Disability and Welfare Payments
Other	• Lost Company Productivity • Losses from Automobile and Life Insurance

THE HUMAN COLLISION

APPENDIX 3-a

0.000 seconds - car hits barrier

On impact, the car begins to crush and to slow down. The person inside the car has nothing to slow him down so he continues to move forward inside the car at 30 mph.

0.100 seconds - car stops

Within 1/10 of a second, the car has come to a complete stop. The person is still moving forward at 30 mph.

0.120 seconds - person hits car interior

One-fiftieth of a second after the car has stopped, the person slams into the dashboard and windshield. This is the human collision. In the car's collision it takes 1/10 of a second to stop; in the human collision it takes only 1/100 of a second.

PREVENTING THE HUMAN COLLISION

APPENDIX 3-b

On impact, the car begins to crush and to slow down.

As the car slows down, the person moves forward until the seat belts restrain him. The belts keep him in his seat and keep his head and chest from striking the car interior.

As part of the car, belted passengers are able to "ride down" the collision – to take advantage of the car's slower stop, as it crushes and absorbs energy. For belted passengers, there is no human collision.

THE EFFECTS OF SEATBELT LAWS THROUGHOUT THE WORLD

TABLE

Country	Effective Date of Law	Belt Usage* Before Law Effective	Belt Usage After Law Effective	Occupant* Fatality Reduction	Occupant* Injury Reduction
Australia (all States)	1/1/69	25%	68%-85%	25%	20%
Belgium	6/1/75	-	92%	39%	24%
Ontario	1/1/76	17%	77%	17%	15%
Quebec	8/15/76	19%	64%	18%	-
Saskatchewan	1/7/77	19%	-	19.5%	9%
Finland	7/1/75	40%	71%	-	-
France	7/1/75	26%	85%	22%	32%
Israel	7/1/75	8%	80%	-	-
Netherlands	6/1/75	Rural: 28% Urban: 15%	Rural: 72% Urban: 53%	-	-
New Zealand	6/1/75	30%	62%-83%	10%	18%
Norway	9/1/75	Rural: 37% Urban: 15%	Rural: 61% Urban: 32%	-	-
Sweden	1/1/75	36%		46%	Serious injuries: 46% Moderate injuries 36%

* Blanks indicate no information available

Source: Journal of Safety Research, National Safety Council, Volume 9, No. 2 (June, 1977).

Transport Canada | Transports Canada
Road Safety | Securite routiere

CL 8301 (E)

LEAFLET TP 2436 FEUILLET

January, 1983

Table 1

Estimates of Shoulder Seat Belt Use According to 1979, 1980, 1981 and 1982 Surveys

Province	% of Drivers Wearing Shoulder Belts in Cars Equipped With Shoulder Belts				% of Drivers Wearing Shoulder Belts in All Cars			
	1979	1980	1981	1982	1979	1980	1981	1982
Nfld.	4.8	2.8	8.6	72.2	4.1	2.7	8.1	71.2
P.E.I.	15.7	6.2	3.4	7.0	14.4	6.1	3.4	7.0
N.S.	14.9	9.3	11.4	8.7	12.7	9.0	11.0	8.5
N.B.	14.7	5.6	8.1	4.2	13.5	5.2	8.1	4.2
Qué.	42.6	39.0	40.7	67.4	38.7	37.9	39.9	66.5
Ont.	52.7	43.7	52.5	48.9	44.1	42.3	50.6	47.3
Man.	5.9	6.0	6.4	7.3	4.8	5.5	6.1	6.3
Sask.	60.9	60.7	50.5	48.4	50.8	56.1	48.6	46.9
Alta.	16.3	12.7	11.0	17.1	12.8	11.5	10.5	16.6
B.C.	59.7	49.3	42.4	53.4	49.6	44.8	39.5	50.5
Provinces with no seat belt legislation	13.0	9.3	9.4	12.1	10.7	8.5	9.1	11.6
Provinces with seat belt legislation	51.0	43.9	46.8	55.9	43.5	42.0	45.2	54.3
Canada	42.7	36.4	38.1	46.2	36.4	34.7	36.8	44.9

Shoulder Belt Fitting 1979 = 91.2%
1980 = 95.0%
1981 = 97.4%
1982 = 96.8%

Ce feuillet est aussi disponible de la deuxième langue officielle

Table 2

Estimates of Shoulder Seat Belt Use
by Road Types for 1982 Survey

Province	Urban	Rural	Total
Newfoundland	72.2	80.4	72.4
Prince Edward Island	7.0	5.7	6.9
Nova Scotia	8.7	4.3	8.4
New Brunswick	4.2	5.5	4.2
Québec	67.4	63.4	67.1
Ontario	48.9	49.5	48.9
Manitoba	7.3	16.3	7.8
Saskatchewan	48.4	24.4	47.5
Alberta	17.1	8.4	16.8
British Columbia	53.4	46.9	53.2
Provinces with no seat belt legislation	12.1	8.9	12.0
Provinces with seat belt legislation	55.9	52.9	55.7
Canada	46.2	43.2	46.0

Results

The estimated proportion taking advantage of shoulder belts when they are available increased from 38.1% in 1981 to 46.2% in 1982 for the nation as a whole. The increase is more noticeable among provinces with compulsory belt-use legislation (Newfoundland, Québec, Ontario, Saskatchewan and British Columbia) in which estimated shoulder belt use increased from 46.8% to 55.9%. In Newfoundland, where compulsory belt-use was enforced from July 1982, the estimated proportion of drivers wearing their shoulder belts rose from 8.6% in 1981 to 72.2% in 1982, highest among all provinces. A very substantial increase was also seen in Québec, from 40.7% in 1981 to 67.4% in 1982, the second highest rate achieved in any province.

No significant change occurred between 1980 and 1981 in the proportion of cars observed having shoulder belts available. The estimated proportion of drivers wearing shoulder belts among all cars (whether or not shoulder belts were available) increased from 36.8% to 44.9% nationally, and from 45.2% to 54.3% in those provinces with compulsory belt-use legislation.

Survey Method

The survey was undertaken by observers at 178 urban sites selected by province, highway type and community size, used for the 1981 seat belt-use survey. The sample is comparable to the samples used in the previous belt-use surveys (Table 1). In addition to the 178 sites, this survey was also undertaken at 22 rural sites (on highways or county roads) and the results of seat belt-use from these rural sites are given separately (Table 2). A weighted combined estimate based on all 200 sites is also presented, for which the traffic counts on urban and rural sites are used as weights.

The 1982 survey duplicated the method of that in 1981, in that observers recorded the availability of shoulder belts, driver's use of shoulder belts, daytime use of vehicle lights, driver's sex and age group.

For further information write to:

Systems Evaluation,
Road and Motor Vehicle Traffic Safety,
Transport Canada,
Transport Canada Building,
Floor 27C,
Place de Ville,
Ottawa, Ontario,
K1A 0N5.

Who Must Wear Seat Belts

Newfoundland and Labrador's Seat Belt Law is effective as of July 1, 1982.

Everyone who is five years old or whose weight exceeds eighteen kilograms (40 lbs.) must wear a belt.

The driver is responsible for those under sixteen years of age to ensure that they are properly restrained. (Except a police officer transporting a prisoner.)

Children born on or after July 1, 1982, are required to be properly restrained in an infant carrier or a rear-facing convertible car seat.

Although the law does not apply to children born before July 1, 1982 or whose weight is less than 18 kilograms, it is recommended that they be secured in a properly installed child seat.

The Seat Belt Law and children's seats apply only to positions where seat belts are available.

A passenger over 16 years of age, is rsponsible for ensuring that his belt is worn.

In older type vehicles containing individual lap and shoulder belts, only the lap belt must be worn.

If the manufacturer originally fitted seat belts have since been removed, these belts must be re-installed.

It is an offence to remove a seat belt or modify it in any way.

Child Exemptions under the Seat Belt Law

1. Children born before July 1, 1982 and whose weight does not exceed eighteen kilograms.
2. In taxis and rental vehicles, infants up to eighteen kilograms are exempt. (Provided rental period is not more than 21 days.)
3. A person who operates a vehicle, registered in another jurisdiction, is exempt for 21 days.

Children under sixteen years of age must use both lap and shoulder belts.

MINISTER'S MESSAGE

The legislation described in this pamphlet is designed to reduce the number of deaths and the severity of injuries which occur on our highways year after year.

Traffic accidents in Canada have been increasing each year, yet in jurisdictions with compulsory seat belt laws, the number of traffic deaths and injuries are on the decline. As well, the cost to treat a belted driver is considerably less than an unbelted driver.

This legislation is designed to protect everyone in your vehicle, both front and rear seat passengers, for positions where a seat belt is available. Be sure that the child restraint system you choose for your child is federally approved and that you install it properly.

Seat belts work — but only when you use them. Protect yourself and your family. Buckle up for safety.

SAFETY IS A SNAP.

Department of Transportation
Government of Newfoundland and Labrador
Ron Dawe, Minister

The Correct Way To Wear Seat Belts

1. The lap belt should be worn snug and low over the hips.
2. The shoulder belt may be worn loose enough to allow an inch between the chest and belt.

TRANSPORTATION

SEAT BELTS "THE LAW"

The Infant Carrier

Infant carriers are especially designed for children from birth until they weigh about 9 kg (20 lbs).

The infant faces the rear of the car, and is securely held in the seat by the infant carrier harness. The seat is anchored in place by the car seat belt, preventing it from moving during an accident or sudden stop.

As a general rule, children should always ride in the rear seat of a car. However, the rear-facing infant carrier may be used in the front seat when you are travelling alone. This allows you to check on the child without taking your attention off driving. If a child needs care, don't do it while driving. Park in a safe place first.

The Child Safety Seat

Children weighing between 9 kg and 18kg (20 to 40 lbs.) should use a forward-facing child safety seat. They must be installed according to the manufacturer's instructions, preferably in the back seat.

The five-point safety harness model is anchored to the seat by an adult lap belt. The harness acts to spread the impact force over the strongest parts of the body. The tether strap prevents the top of the seat from flying forward. It must always be securely attached to a bolt installed in the rear shelf or the floor of the vehicle behind the rear seat.

Types of Child Seat Carriers

Infant Carriers

Child Safety Seat

Always carry children in the rear seat if possible.

Convertible Car Seats (rear-facing)

Convertible Seat

There are convertible child safety seats available which can be used for two age groups: for the baby, as a rear-facing infant carrier, and when the child is older, as a front-facing safety seat.

If no child safety seat is available, use a seat belt. It is safer for toddlers and young children to use a regular lap belt than no restraint at all.

Pregnancy

Studies have shown the most frequent cause of death in car accidents for the unborn child is the death of the mother. So, the best way to protect an unborn child is to ensure the survival of the mother.

Pregnant women should always wear the lap and shoulder belt when riding in a car. It's important that the belt be worn properly:

- Set the lap belt low so it pulls downward on the pelvic bones, not against the abdomen.
- Wear the seat belt assembly as snug as possible, without being uncomfortable.
- Always consult your doctor, even after a minor accident.

Adult Exemptions Under the Seat Belt Law

1. Any person who holds a medical exemption certificate.
2. Any person who is engaged in work which requires that person to alight from and re-enter a vehicle at frequent intervals and does not drive at a speed exceeding 50 kilometers per hour.
3. While driving in reverse.
4. Where there is no seat belt provided by the manufacturer.
5. All vehicles registered outside of Newfoundland and Labrador from which the seat belt assembly has been removed.

What about
Child Restraints?

Short trips, long trips
Give children "buckle up" protection

Under New Brunswick's seat belt legislation, drivers are responsible for children under 16 years of age to be buckled up. All seat belts available are to be used. If there aren't enough seat belts for them all, extra children obviously can't be belted.

Children over Five

-- or weighing more than 50 lbs. (23 kg.), should be "buckled up" in the back seat of the car, using the regular lap belt.

Children under Five

-- or weighing less than 50 lbs. (23 kg.). These young passengers deserve all the protection you can give them. The following protection is recommended:

Less than 20 lbs. (9 kg.). Children unable to sit upright are best protected by child restraints designed especially for infants. These should face the rear of the car and be securely anchored by an adult seat belt. In some newer cars a special clip is required to adapt the seat belt to provide positive anchorage. Consult the owner's manual for the correct clip and follow instructions exactly.

Between 20 and 40 lbs. (9 kg. and 18 kg.). Children may be protected by two basic child restraints:

- Five-point harness anchored to the car seat by an adult lap belt and the top anchor strap secured to interior of car. This prevents the seat from flying forward in an accident.
- Protective shield secured to lap belt only; requires no tether strap.

Over 40 lbs. (18 kg.). Children can use regular lap belts and booster cushions when they outgrow child restraints. Take special care to position child with lap belt fitting snug and low on hips. If child of this size must ride in front seat and there is a shoulder strap, make sure it fits correctly, so that it doesn't pass across the child's face or neck.

"Checking" on an infant in a rear seat restraint can distract the driver and taking attention off driving for even a few seconds to look back could cause an accident. If you are the only adult in the car with an infant it's a good idea to put the child in a firmly-secured rear-facing restraint on the front seat beside you. If the child does require care don't do it while driving -- park your car first.

Federal Child Safety Seat Regulations

If you have purchased a child safety seat in Canada and are using it according to the manufacturer's instructions, you can be confident that it will protect your child in a traffic collision.

Regulations were first established in 1972 in Canada to specify safety standards for car seats designed to protect children weighing generally between 9 kg. and 18 kg. (10 to 40 lbs.). Revisions to the regulations in 1974 effectively removed from the market all seats which did not provide adequate protection to a child in the event of a collision.

Although infant carriers were not included in these regulations, accident investigations have shown that rear-facing carriers currently available, which are specifically designed for restraining infants weighing 9 kg. or less, are highly effective in preventing injuries.

Transport Canada now has published a regulation governing restraint systems for infants weighing less than 9 kg. It has been in effect since September, 1982.

The safety standards set by Transport Canada for both infant and child restraint systems ensure that the movement of the child will be limited if a collision occurs. They also provide guidelines on strength, flammability, padding thickness, installation instructions and labelling requirements.

All infant and child restraint devices must meet the federal safety standards. Manufacturers of infant carriers will indicate compliance by stating on a label affixed to the seat that it meets the Canadian Motor Vehicle Safety Standard (CMVSS 213.1). For restraints designed for children over 9 kg. (20 lbs.) the label will state that the seat complies with the requirements of the Children's Car-Seats and Harnesses Regulation. The label also must state the size of child for which the seat is designed and instructions must be provided on how it is to be installed.

Additional Information on Restraint Systems may be obtained from:

- **Department of Transportation**
  Motor Vehicle Administration
  and
  Public Safety Co-ordination 453-3845
  P.O. Box 6000
  Fredericton, N.B.
  E3B 5H1
- **Any Driver Examiner Station or Revenue Office**
- **New Brunswick Highway Patrol Detachments**
- **Department of Health**
  Public Health Offices
- **Royal Canadian Mounted Police Detachments**
- **City, Town or Municipal Police Stations**
- **Transport Canada Regional Public Affairs Office:**
  Moncton 388-7314
- **Consumer and Corporate Affairs,**
  Product Safety Regional Office:
  Moncton 388-6633

N.B. BUCKLES UP

What you should know about SEAT BELTS

Amendments to the Motor Vehicle Act will make the use of seat belts mandatory for most New Brunswickers. The legislation requires that drivers and passengers make proper use of the installed seat belt assemblies while driving or riding in a motor vehicle. In vehicles having separate lap and shoulder belts, use of the complete system is required.

- **Drivers responsible for young passengers** – The new legislation requires that drivers take responsibility for seat belt use by passengers under the age of sixteen. This means that when a passenger in that age category occupies a seat equipped with a seat belt, the driver must make sure the restraint system is properly adjusted and fastened.
- **Number of seat belts required** – Under the Federal Motor Vehicle Safety Act, the seat belt requirement has progressed year by year from the basic front seat lap belt to the present full front and rear protection. This requirement has also been extended to include trucks. The New Brunswick Law states that seat belt assemblies must be used, and may not be altered or changed from the original design. In short, drivers and passengers are required to wear seat belts as they were designed to be worn.
- **Exceptions to the law** – Seat belts are not required where the driver or passenger is unable to wear such an assembly for medical reasons but in such cases, the individual must be able to produce a certificate of exemption signed by a medical practitioner. Nor are seat belts required when a driver or passenger is engaged in work that requires driving at speeds less than 40 kilometers per hour and leaving and re-entering the vehicle at frequent intervals. Finally, seat belt use is not required when driving a motor vehicle in reverse.
- **Penalties for seat belt infractions** – Police officers throughout New Brunswick may check at any time for seat belt use by drivers and passengers. A violation makes the offender liable to a fine of up to $100.

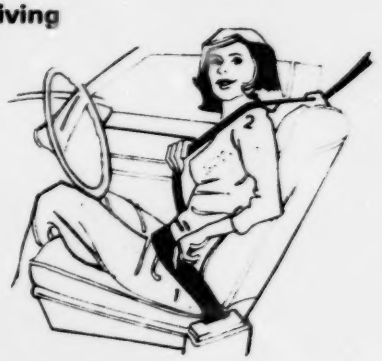
Even "around the block" can be more dangerous than highway driving

It's a fact -- your short trip to the store, or any short trip, can be more dangerous than driving on a high-speed, long-distance highway.

Why? Because people drive more local short trips than long-distance ones. So, chances of an accident close to home are greater. In comparison, the accident rate is low on main highways.

Don't take chances on injuries to yourself or your family. Set a good example by wearing your seat belt, and make sure the youngsters do, too -- even "around the block". Remember, it is the law.

1. The lap belt should be worn snug and low over the hips.
2. The shoulder belt, if adjustable, may be worn loose enough to allow an inch or two between the chest and the belt.



Wear your seat belt for every good reason

- Seat belts reduce chances of injury and death by 50 per cent. Properly buckled in, with both lap and shoulder belts, you could walk away from accidents that otherwise would be fatal.
- Most injuries and deaths result from moderate-speed accidents **close to home.**
- Many people think they can protect themselves in a collision. But even in a low-speed crash an unbelted person hits the inside of the car with a force of several thousand pounds.
- In a collision, front seat unbelted occupants can be thrown against the driver ... back seat passengers can be tossed forward, striking or crushing those in the front seat.
- Fire or submersion in water is very rare in accidents. Even in such cases, seat belts are an advantage because they help you to remain conscious and thus get free of the car.
- Seat belts keep the driver behind the wheel and in control of the car.
- Properly adjusted seat belts can protect the lives of pregnant women.

Questions and Answers on the Seat Belt Legislation

Question: My car does not have seat belts. Must I install them?
Answer: No, if vehicle is a 1970 or earlier model. If a 1971 model or later, original seat belts must be retained, or re-installed if they have been removed.

Q: My car has separate shoulder straps and lap belts. Must I wear both of them?
A: Lap belts must be worn. The shoulder strap is optional if your car was manufactured prior to January 1, 1974.

Q: The seat belts in my car aren't working. Must I have them repaired?
A: Yes.

Q: My light-duty pick-up truck or van does not have seat belts. Must I install them?
A: No, if the truck is a 1971 or earlier model. If a 1972 model or later, original seat belts in the truck cab must be retained.

Q: What if there are two passengers in the front seat and only one extra seat belt?
A: The driver must belt up, plus one passenger. There is no prohibition against carrying passengers in seats for which the manufacturer hasn't provided seat belts.

Q: If an adult drives five or six children to school, hockey practice, etc., and there aren't enough seat belts for them all, what should be done?
A: All seat belts available must be used. The extra children do not have to be belted.

Q: What is the fine?
A: From $25 to $100, plus costs.

Q: Are all car drivers responsible for their passengers buckling up?
A: Not if the passengers are sixteen or over. But drivers are responsible for children up to sixteen.

Q: I suffer from claustrophobia. Must I buckle up?
A: If for any physical or psychological reason you feel you can't buckle up, see your doctor. If he considers there are valid medical grounds, he can provide you with a certificate stating you do not have to buckle up. This would exempt you.

Q: I drive a vehicle on a delivery route. Must I buckle up?
A: On the trip to your drop-off area, yes. But in your drop-off zone, if your delivery driving speed doesn't exceed 40 km/h, and you are frequently getting in and out of your vehicle, you are exempt.

1

INTRODUCTION

Every day in Manitoba someone suffers from the human tragedy of a traffic accident.

Of course, every effort is being made to improve road safety. As of January 1, 1984, amendments under The Highway Traffic Act of Manitoba regulate the use of seat belts, child restraints and motorcyclist helmets for all drivers and passengers of motor vehicles in this province.

These safety devices are all proven effective in reducing injuries and deaths resulting from accidents.

The Federal Department of Transport estimates that if 80 percent of the Canadian population wore seat belts, a staggering 30,000 lives could be saved from 1982 to the year 2000.

It's up to you to protect yourself and the ones you love. Get into the traffic safety habit and "Click into Safety."

How Seat Belts Work

Since it is impossible to prevent all accidents on the road, we must do the next best thing—protect ourselves from the "human collision."

Securely fastened seat belts keep people from becoming flying missiles in an auto accident. If they are restrained from striking a hard surface or flying out of the car, the likelihood of serious injury or death is reduced significantly.

Without seat belts, the overall risk of injury is increased by four times, risk of serious injury by 65 percent and risk of death by 80 percent.

Seat belts work to help protect the body from the "human collision" and lessen the life threatening forces of traffic accidents.

Everyone Should Buckle Up

Seat belts can only work if you wear them properly fitted at all times.

Medical evidence and traffic statistics overwhelmingly support the wearing of seat belts. Weigh the evidence and put the odds in your favour by buckling up.

A recent Manitoba survey (March, 1983) revealed that 78 percent of all respondents think that seat belts can reduce personal injury in most accidents. Seventy-seven percent of those surveyed responded that if everyone wore seat belts health costs would be reduced.

Children and Child Restraints

In Canada, 23 percent of all the deaths of children between one and 14 arise from motor vehicle accidents.

Children need special protection because of the undeveloped structure of their growing bodies.

Babies should be protected by infant carriers. The safest position for these carriers is in the middle of the back seat facing the rear and anchored by a seat belt.

As children grow to reach 9 kg. (20 lb.) they are usually ready for a child safety seat. The seat should be placed in the centre of the rear seat and properly anchored by a tether strap.

Manitoba's "Buckle Up Baby" program, a Canadian Jaycette project, educates parents as to the importance and use of proper child restraints and provides an infant restraint rental program. For more information, please contact the Red Cross or the Canada Jaycettes organization nearest you.

The Kinettes are also initiating an infant restraint rental program in some Manitoba communities.

2

Safety Guidelines to Follow

Children Under 9 kg. (20 lb.)

All children from newborn to approximately 9 kg. need to be secured in an infant carrier or convertible car seat. The carrier should always be adjusted to the rear facing position and fastened securely by the lap belt. Infant carriers or car seats can be used in the front seat but the best possible position is the middle of the back seat.

Note: Regardless of weight, if your child is tall enough that the middle of his or her ears project above the top of the infant carrier or seat, then the child should be graduated to a toddler seat (see next section).

Toddlers 9 to 18 kg. (20 to 40 lb.)

Children who weigh between 9 to 18 kg. need to be secured in either a convertible car seat adjusted to the forward facing position or a child safety seat. Wherever possible, the seat should be placed in the middle of the back seat.

Tether straps are required for children in this weight group. All convertible car seats and child safety seats have a tether strap to be bolted through some structural metal part of the vehicle (following manufacturer's instructions). In vans and station wagons, bolt the tether strap to the floor of the cargo area. In trucks, bolt it through the rear wall of the cab.

Note: Regardless of weight, if your child is tall enough that the middle of his or her ears project above the top of the child restraint, then the child should be in a regular seat belt to avoid possible whiplash.

Children Over 18 kg. (40 lb.)

Small children 18 to 23 kg. (40 to 50 lb.) can wear a regular lap and shoulder belt providing a booster seat is used to ensure that the belts are properly positioned on the child's body. Only booster seats meeting federal government safety regulations (1983) should be used. The best position for the child is in the centre of the rear seat with the lap belt over the hips rather than up over the stomach.

If no booster seat is used, the child should be seated in the back seat and a lap belt should be worn. If the front seat position must be used, the lap/shoulder belt should be done up and adjusted properly to fit the child.

3

Older Children and Adults

FRONT SEAT

If the shoulder harness is attached to the lap belt, both should be worn in a properly adjusted manner. The lap belt should be worn snugly across the hips below the stomach. Wear the harness over your shoulder and allow no more than a flat width of space between the harness and your chest. Shoulder harnesses can be adjusted for comfort by consulting the vehicle owner's manual.

REAR SEAT

The lap belt should be worn snugly and well down on the hips.

4

Motorcyclist Safety Helmets Save Lives

Medical and traffic research concur that motorcyclists who wear helmets enjoy a better chance of accident survival and greatly reduced injuries.

The American Motorcycle Association reports, "the cyclist increases enormously his/her) chances of lessening injuries and staying alive if he/she) wears a helmet."

Actual reductions in casualty rates per 1,000 motorcycle registrations compared over a five year period preceding and following helmet law enactments were: 8.3 percent in British Columbia, 21.3 percent in Alberta, 16.2 percent in Ontario and 32.4 percent in Quebec.

Motorcycle accidents happen. Each year in Manitoba approximately one in 19 motorcycles is involved in an accident. Those riders wearing a helmet stand the best chance of escaping serious head injury or death.

Seat belts have the potential to reduce injuries and save lives more than any other practical protective measure.

In Manitoba, if 80 percent of Manitobans buckled up, the savings would be approximately 30 lives and at least 2,000 fewer serious injuries every year.

Get into the habit of wearing your seat belt. Show you care by ensuring your children are safe in proper child restraints. Remind others to buckle up.

If you're a motorcyclist, your best protection is proper riding gear and a safety helmet.

Traffic safety is up to all of us. Our lives depend on it.

For more information contact:

The Manitoba Public Insurance Corporation
Safety Department
Room 947
330 Graham Avenue
Winnipeg, Manitoba
R3C 4A4
943-0551

ALIVE
A Safety Initiative through the Manitoba Public Insurance Corporation

Si vous désirez recevoir cette brochure en français:
appelez au 943-0551 ou écrivez à
La Société d'assurance publique du Manitoba
Service de la sécurité
Pièce 947
330, avenue Graham
Winnipeg (Manitoba)
R3C 4A4

New amendments under The Highway Traffic Act of Manitoba (January 1, 1984) require the use of seat belts, child restraints and motorcyclist helmets for all drivers and passengers of motor vehicles in this province. Any person who is guilty of an offence under this law is liable, on summary conviction, to a fine of not less than $50.00 and up to a maximum of $100.00 for each violation.

Straight Talk on Safety

Questions on Seat Belts

Q If I don't wear my seat belt won't I be the only one to suffer?

A This is really not so. Even if you are the only person injured, your pain and suffering will affect your family, friends, and the community. Chances are that on impact your flying body will strike and seriously injure some or all of the car's occupants or even a passerby if you are forcibly ejected.

Q I mostly take short drives in the city. Is a seat belt really necessary?

A It has been established that three out of four fatal accidents occur within 25 miles of home. Fatal injuries to unbelted drivers and passengers have been sustained at speeds as low as 19 k.p.h. (12 m.p.h.). In addition, however careful you or your driver might be, you cannot always avoid the high speed crash caused by someone else.

Q Is it better to be thrown clear of the car in a serious accident?

A In fatal automobile crashes about 25 percent of those killed have been ejected from the car. Experts estimate that about 80 percent of these fatalities could have been prevented if the victims had remained in the car. In fact, if you are in a car accident and thrown clear you are 25 to 50 times more likely to die.

Your exit route may involve:

1. Being thrown through the windshield
2. Striking and injuring or killing someone else in the car
3. Being crushed by the car
4. High speed impact with the road or some solid stationary object

Q What if I'm wearing a seat belt and my car catches on fire or sinks in water?

A Accident statistics reveal that fire and submersion accidents account for approximately one percent of accidents. Should you be involved in such an accident it is important to remain conscious. You have a better chance of remaining conscious and escaping from the vehicle if you are wearing your seat belt.

Questions on Child Restraints

Q Is the cost of infant carriers and child seats worth it?

A Infant-child safety seats are a small price to pay for the lives they save. It is an expense that certainly pays for itself in protection and peace of mind.

Q Is my infant best off in my arms during car travel?

A Medical and accident research conclude that it is one of the worst possible positions for an infant to ride in. The forces exerted during an abrupt stop are beyond any individual's power to control or restrain.

The force exerted in a crash stop at 32 k.p.h. (20 m.p.h.) will cause a 9 kg. (20 lb.) child to exert a force of 181 kg. (400 lb.) and fly out of your arms and possibly out of the car.

Of course if you are not wearing a seat belt, the force of your own weight can even crush your child.

Q Where should my child travel—in the back or front of the car?

A The safest position for your child—provided there is a seat belt—is the middle of the back seat. This is true no matter what restraint system is in use.

Questions on Motorcyclist Helmets

Q Wouldn't compulsory training programs for all new riders avoid the need for wearing safety helmets?

A All the rider education in the world can't completely eliminate motorcycle accidents.

If the training and education do not result in the rider protecting himself or herself with a helmet, that education will have failed.

Q Does wearing a helmet reduce the hearing capability of the motorcyclist?

A The evidence is clear that a well-designed safety helmet does not significantly reduce hearing.

At typical speeds the helmeted rider has a considerable advantage in the detection of warning signals as compared to the bareheaded rider, who must contend with a high level of wind noise.

Q Does wearing a helmet impede the motorcyclist's vision?

A Traffic statistics show that 75 percent of all motorcycle accidents arise within 45 degrees of straight ahead.

A well-designed full coverage helmet restricts the rider's peripheral vision by less than three percent.

MANITOBA

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WHERE SAFETY SEATS CAN BE PURCHASED

Many brands of safety seats are available in Nova Scotia at:

—leading department stores
—automotive supply stores
—automobile dealerships

THE COST OF SAFETY SEATS

The prices of new seats range from (approximately) $40.00 to $60.00—a small cost where your child's safety is concerned.

The "Buckle Up Baby" program however, provides an alternative to purchasing an infant carrier.

BUCKLE UP BABY RENTAL PROGRAM

In an effort to reduce the expense of purchasing a new infant carrier, the Junior Leagues of Halifax and the Women's Institutes of Nova Scotia in co-operation with the Nova Scotia Safety Council, operate a rental program called "Buckle Up Baby".

Safety seats for infants weighing up to 9 kg. (20 lb.) may be rented for a period of approximately nine months at a cost of $20.00 (if rented from the Women's Institutes of Nova Scotia) or $25.00 (if rented from the Junior Leagues of Halifax). A refund of $10.00 is given when the seat is returned in good condition.

Should you have any questions regarding the "Buckle Up Baby" program, vehicle restraints, or any other areas of injury and accident prevention, please feel free to contact us at:

NOVA SCOTIA SAFETY COUNCIL
2627 Joseph Howe Drive
Halifax, Nova Scotia
B3L 4H8

PHONE: 454-9021

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What Parents Need To Know About Vehicle Occupant Restraints

OCCUPANT

RESTRAINTS

SAVE

LIVES

NOVA SCOTIA SAFETY COUNCIL

THE FACTS ARE:

- The greatest single threat to a child's life in our society is riding unrestrained in the family car.
- In Nova Scotia in 1981 four children under the age of 14 were killed and 127 injured while riding in motor vehicles.
- 90% of these deaths and 70% of these injuries could have been prevented if proper restraints were used.
- OCCUPANT RESTRAINTS SAVE LIVES!

WHOSE RESPONSIBILITY IS [illegible]

Young children are not yet [illegible] enough to protect themselves. They rely on responsible adults to provide the protection they need. Don't let them down! The prevention of injuries due to vehicle mishaps requires a single parental action . . . placing the child in a proper occupant restraint.

WHY CHILDREN ARE FAR MORE SUSCEPTIBLE THAN ADULTS TO SERIOUS INJURIES FROM MOTOR VEHICLE ACCIDENTS.

Due to physical and behavioural factors, during a collision or sudden stop, children are more likely to land with their head and more likely to be thrown from their seat if unrestrained.

Children are particularly susceptible to injuries and deaths occuring when there is no collision. Many children are killed or injured during sudden stops or unexpected defensive driving manoeuvers or by falling from a moving vehicle.

EVERYONE SHOULD BUCKLE UP.

For the safety of all passengers—children and adults—occupant restraints should be worn by everyone.

In the event of a collision, sudden stop, or unexpected defensive driving manoeuver, the restrained adult is:

—more likely to remain conscious and uninjured,
—more likely to remain in control of the vehicle,
—less likely to be thrown against a child passenger causing serious or even fatal injuries.

You also set a good example by buckling up yourself.

CARRYING THE CHILD ON YOUR LAP PROVIDES NO PROTECTION

Do not make the mistake of believing that your infant is safe if held on your lap! In a 50 kmp (30 mph) frontal crash, a 4.5 kg. (10 lb.) infant would be torn from your arms at a force of 135 kg. (300 lb.). It is a myth to think you can hold onto that child . . . you cannot! And, if you are also unrestrained, that child would act as a cushion and be crushed between you and the dash of the vehicle.

ARE ADULT SEAT BELTS SUITABLE FOR CHILDREN?

Due to their small size and delicate skeletal structures, young children do not fit the adult seat belt very well. For this reason, infant and child occupant restraints (safety seats) have been designed and constructed to spread energy forces which occur at the time of an accident over the child's shoulder, chest, and pelvic bones.

However, if a proper restraint is not available, the use of an adult seat belt will provide more protection from injury than if nothing at all were used. Under no circumstances should an infant or child travel unrestrained.

The rear centre seat is the safest location in a car for a passenger to ride. Placing children in the front seat should be avoided whenever possible.

USE THE REAL THING—NO SUBSTITUTES

Car beds and flimsy household infant carriers are no substitute for an infant occupant restraint. They provide little to no protection in a crash situation.

CHECK BEFORE USING SECOND-HAND SAFETY SEATS

Thanks to 1975 regulations, all children's safety seats sold in Canada must comply with safety standards and bear labels to this effect.

New regulations regarding infant carriers became effective in September of 1982. All such carriers available for sale in Canada must comply with federal regulations.

Before using an older safety seat it may be wise to check with Transport Canada or phone the Nova Scotia Safety Council to ensure its effectiveness.

CHILDREN BEHAVE BETTER WHEN TRAVELLING IN OCCUPANT RESTRAINTS.

Recent studies of child passengers have concluded that:

—97% of unrestrained children tend to display unsafe and distracting behaviour (such as standing, jumping, climbing, kicking, and screaming).

—only 5% of restrained children display this behaviour.

—after introducing a child safety seat, the behaviour of formerly unrestrained children dramatically improves.

—child passengers behave better with the consistent use of safety seats.

ADDED ATTRACTIONS

- The child secured in a safety seat is elevated and therefore is able to look out the window and watch the world go by.
- In the opinion of many professionals, the ability to see one's surroundings greatly reduces the occurrence of motion sickness.
- The securely restrained child is more relaxed and therefore, more likely to fall asleep.

Children very quickly come to develop a feeling of comfort and security in a child restraint. To achieve this, however, the restraint must be used everytime the child rides in the car.

OCCUPANT RESTRAINTS ARE THE SOLUTION TO TWO PROBLEMS.

- You and your children will travel more safely protected in the event of sudden stops and collisions.
- You will be a better driver because of fewer distractions.

HOW TO SELECT A SAFETY SEAT.

Choose the seat that best suits your requirements considering the age and weight of your child and the type of vehicle you drive. Install it properly according to the manufacturer's instructions.

Four types of safety seats are available in Canada. They are:

—infant carriers
—child safety seats
—convertible seats
—booster cushion

INFANT CARRIERS

Birth to 9 kg. (20 lb.)

Every new baby should leave the hospital safely protected in an infant carrier.

Infant carriers are rear-facing basket-type seats anchored by the adult lap belt. The infant is securely held in the seat by a harness. While infant carriers can be used in the front seat when you and the baby are travelling alone, they provide the greatest protection when mounted in the centre of the vehicle's rear seat. In Nova Scotia infant carriers may be rented under the "Buckle Up Baby" program.

CHILD SAFETY SEATS

9 kg. (20 lb.) to 18 kg. (40 lb.)

Child Safety Seats are used in the forward-facing position and provide the greatest protection when secured in the rear seat.

A harness or shield serves to spread the impact forces of an accident over the strongest parts of the child's body. Child safety seats are anchored to the car seat by an adult lap belt and a tether strap. The tether strap prevents the top of the seat from flying forward and must be hooked onto a solid part of the vehicle.

Check the manufacturer's instructions for methods of installing the tether strap in your vehicle since proper anchorage is essential to the seat's effectiveness.

CONVERTIBLE SEATS

Birth to 18 kg. (40 lb.)

Convertible safety seats can be used as a rear-facing infant carrier and, when the child is older, as a forward-facing child safety seat.

LAP BELTS and BOOSTER CUSHIONS

Children over 18 kg. (40 lb.)

When a child safety seat is not available or when the child has outgrown their safety seat, an adult lap belt should be worn. Make sure the child is in the back seat and the lap belt is positioned low and snug over the child's hips, and not across the abdomen.

Sitting the child on a folded blanket or firm pillows will help prevent the lap belt from riding up over the child's stomach.

Booster cushions meeting federal government safety regulations will be available from manufacturers about June 1982.

LAP BELTS and SHOULDER HARNESSES

Adults and Adolescents

Adolescents who have developed to the point of wearing a shoulder harness along with the lap belt should wear both when they are available. Parents should wear their belt and harness as well. The lap belt should be worn snugly over the hip and the shoulder harness over the shoulder, and not under the arm. The shoulder harness should never be worn without the lap belt.

Pregnant Women and the Unborn Child

The leading cause of death for the unborn child is the death or injury of the mother in an automobile accident.

To protect the unborn child, pregnant women should wear seat belts right up to term.

Make sure that the lap belt is worn well down, over the hips below the curvilinear area, thereby distributing the force over the pelvic bone.

Any injury caused by the belt during the crash phase of a collision will be minor compared to the injuries received had a belt not been properly worn.

the human collision

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Canada

THE HUMAN COLLISION

How injuries occur...
How seat belts prevent them.

ACKNOWLEDGMENT

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INTRODUCTION

Motor vehicle accidents are a serious social and economic problem. In Canada, one out of every three reported accidents results in injury and one in every hundred results in death. During 1974, there were nearly 230,000 people injured and 6,290 killed in traffic accidents. Serious accidents are especially frequent among younger people. For people under the age of 35, traffic accidents are responsible for more deaths than any disease and for more deaths than all other kinds of accidents combined.

In Canada, seat belt installation has been mandatory for all cars built since January, 1971. Even prior to this date, a great many cars were fitted with seat belts. It is estimated that, by the end of 1976, approximately 95% of all cars will be equipped with seat belts in the outer front seat positions and close to 90% will be equipped with seat belts in the rear seating positions.

The use of seat belts dramatically reduces the risk of injury and death. Scientific evidence strongly supports the value of seat belts, yet only a small proportion of people actually use them. People do not wear seat belts for a variety of reasons: fear that the seat belt will trap them in their cars; the belief that good drivers don't need them. Some people feel that they are just too much trouble.

This booklet provides information to help you decide, on the basis of the available scientific evidence, whether or not seat belts are worth the trouble it takes to use them.

WHAT HAPPENS IN A COLLISION

In recent years, motor vehicle collisions have been studied in an effort to reduce the severity of injuries. Ultra-slow-motion film and instruments for measuring forces have been used in these studies. As a result, we now have a good understanding of what happens to the car and to the people inside during a collision.

The Car's Collision

A standard kind of test crash involves running a remotely-controlled car straight into a solid concrete barrier. This is the simplest type of crash, and it is used as a standard or reference point for other test crashes and real accidents.

When a car strikes a solid object, it stops very abruptly. The front bumper is the first part of the car to come in contact with the barrier and it stops immediately. The front end crushes as the car comes to a complete stop.

At an impact speed of 30 miles per hour, the front of the car crushes about two feet and the car comes to a complete stop within one-tenth of a second. The crushing of the front end serves as a cushion for the rest of the car, and helps absorb the shock of the collision. As a result, the passenger compartment comes to a more gradual stop than the front of the car, and it remains undamaged by the collision.

Even in severe collisions, the passenger compartment usually remains in good shape. If a collision occurs at an extremely high speed or if the car is hit broadside, the passenger compartment can be partially crushed. Fortunately, this happens in only a small minority of all collisions. In the great majority of accidents, the front or rear end of the car sustains most of the damage. The passenger compartment usually is not damaged at all by the vehicle's collision. Instead it is damaged by the person striking it with his head or body.

The Human Collision

It has become clear that there are really two kinds of collisions within a single accident. The first is the car's accident in which the car hits something, buckles and bends, and then comes to a stop. The second and more important collision is the "human collision" which happens when a person hits some part of the car. It is the human collision that causes injury.

In the 30-mile per hour barrier crash, the car is crushed a couple of feet and comes to a stop about one-tenth of a second after hitting the barrier. Slow-motion film would show that the people keep moving inside the passenger compartment at 30 miles per hour. They continue moving inside the car during the one-tenth of a second that the car takes to stop. The people are still moving forward at their original speed when they slam into the steering wheel, windshield or some other part of the car. This is the human collision.

A test-track crash into a barrier at 30 mph.

0.000 seconds - car hits barrier

On impact, the car begins to crush and to slow down. The person inside the car has nothing to slow him down so he continues to move forward inside the car at 30 mph.

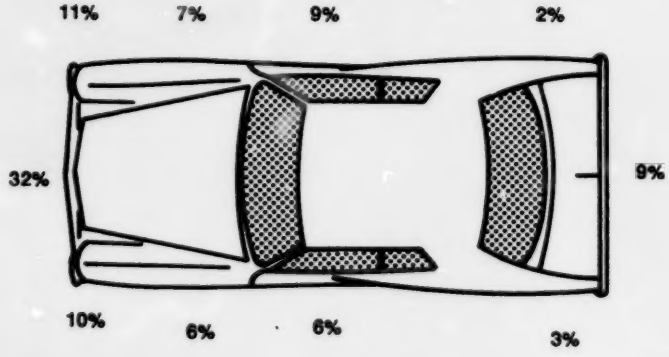
0.050 seconds - car crushes

The car slows down as the crushing of the front end absorbs some of the force of the collision. The person inside is still moving forward at 30 mph.

0.100 seconds - car stops

0.120 seconds - person hits car interior

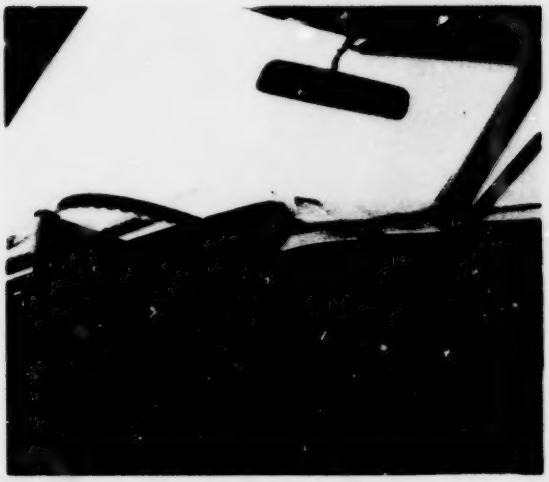
One-fiftieth of a second after the car has stopped, the person slams into the dashboard and windshield. This is the human collision. In the car's collision it takes 1/10 of a second to stop; in the human collision it takes only 1/100 of a second.



Percentages of Primary Impact in Urban Accidents

There are fewer side impacts in highway collisions (G. M. Mackay and C. P. de Fonseka, 1967)

Serious damage to the front end of this car resulted from a head-on crash. The windshield shows evidence of the human collision.



The interior of the car indicates that the passenger hit the windshield and dashboard. The driver bent the steering assembly with his chest.

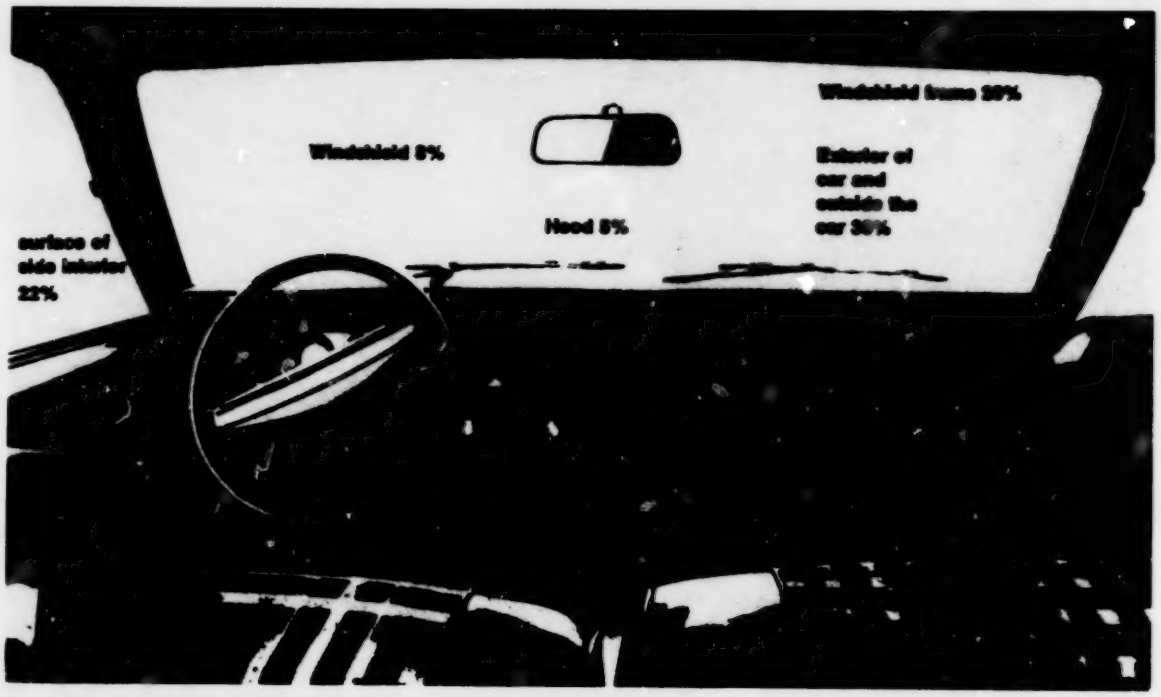
It's The Human Collision That Hurts

It is not easy to appreciate just how severe the human collision can be. To help understand what happens, imagine someone walking briskly head-first into a steel post. This would be about a 3 or 4-mile per hour human collision. The person would probably survive without serious injury. Then imagine him running full speed into the steel post. This would be about a 15-mile per hour collision. His injuries would be severe and he might not survive. Now imagine his head striking the post at 30 miles per hour. The force would be four times greater than at 15 miles per hour and the person would not survive. In a 30-mile per hour barrier crash, an occupant strikes the interior of the car with a force of several thousand pounds, causing serious injury to himself.

During a collision a person can strike the windshield, the windshield frame or a door post. All of these are hard and unyielding. When a person hits something hard he must come to a stop over a very short distance, one to two inches. Because the hard surface will give way very little, his body must absorb most of the force of the impact.

This car was struck on the right side near the front. The car door was bent by the driver who moved across the car toward the point of impact.

The interior of the same car shows that the unbelted driver hit the windshield pillar and as well the door. A human collision of this severity is usually fatal.



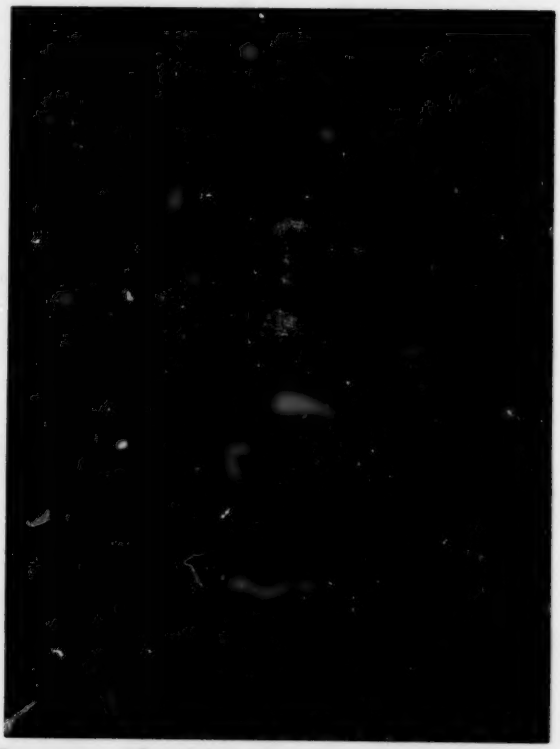
The above photo shows the percentage of occupants who were fatally injured by different objects inside the car. For example, the steering assembly caused fatal injuries to 30% of vehicle occupants killed in collisions. Frequently an occupant was injured by hitting more than one object. As a result, the percentages add to more than 100%. (Wilson and Savage, 1973)

Head and chest injuries are the most frequent cause of death in collisions. In Ontario about half of fatal accident victims die of head injuries. Severe injuries to the head and chest can result even in minor accidents. Chest injuries from the steering assembly are common in car accidents. Facial disfigurement often results from striking the windshield.

When an occupant strikes a hard edge, a knob or a lever in the car, all of the force of the impact is concentrated on only a small part of his body's surface. For example, gearshift levers have been known to penetrate the skull and cause death. Severe injury from hard or sharp objects can result even in a relatively minor crash.

If a person hits the steering wheel or a padded portion of the interior, some of the force is absorbed by the car. Except in very low-speed collisions, this will not be enough to protect the occupants from injuries. Padded dashboards and collapsible steering columns provide only a few inches of cushioning. If an occupant's head hits a well-padded dashboard at more than 30 miles per hour, serious injury will result.

Some people believe that they can protect themselves in a crash by holding onto the steering wheel, or bracing themselves with their arms or legs. Collisions usually happen too fast to permit this. Even if there is time to brace yourself, the forces involved in most collisions are too great to withstand, even at moderate speeds.



Percentages of Fatal Injuries Sustained in Vehicle Collisions
Injuries to the head are the most frequent cause of death in vehicle collisions.

Person-To-Person

In a collision, passengers tend to move towards the point of impact, not away from it as might be expected. The tendency of everyone in the car to move in the same direction during a collision sometimes gives the term "human collision" special meaning.

In a frontal collision, people in the front seat can receive serious neck and spinal injuries from being struck by rear-seat passengers. Vehicle occupants can bump heads with fatal force. In a side collision a person can crash into the passenger next to him and force him out the window or door. During a collision people become high-speed projectiles, so it is not surprising that person-to-person contact is a common source of injury.

People often carry young children on their laps while riding in a car. This can lead to another form of human collision. Accident studies have shown that mothers can crush their children against the dashboard during a crash. Even in a relatively minor accident or panic stop, a child can be pulled away with surprising force and hit the dashboard or floor.

In a crash or sudden stop, an adult can crush a child against the dashboard.

SEAT BELTS PREVENT THE HUMAN COLLISION

It's Not the Fall — It's the Stop at the End

The first attempts to research the human body's ability to withstand crash forces were begun in the early 1940s by Hugh DeHaven. During investigations of air crashes, he became interested in "miraculous" survivals. This interest led DeHaven to look for other instances of survival of severe impacts. He studied cases in which people had survived falls from high places. Through analysis of these "freefall" case histories, he demonstrated that under proper circumstances the body could withstand extreme impact forces.

In each case of freefall survival, the person landed on something like soft ground or an automobile roof, something that absorbed some of the force created by the fall. When the person landed, the surface gave way a few inches. These few inches allowed a more gradual stop than if the landing had been on a hard surface. If the person landed on a large portion of his body (flat on his back for example), the force of the fall was distributed more evenly across the surface of his body. As a result, the person's injuries were less severe.

DeHaven concluded that injury could be reduced if the forces of an impact were spread out over time and space. In fact, spreading out the forces of the impact — and stretching them out over just a few hundredths of a second — could make the difference between life and death. He suggested that improved interior design and restraining devices, such as seat belts, would serve to stretch out the impact of a collision and to distribute its forces over the stronger parts of the body. His ideas were eventually adopted in both automobile and aircraft designs.

How Much Can People Take?

Others took up DeHaven's interest in the ability of the human body to tolerate crash forces. Colonel

John Stapp of the U.S. Air Force was one of the first to initiate scientific testing of DeHaven's observations. In the 1950s he developed various crash simulators to test the upper limits of tolerance to the forces of deceleration. The best known of these was a high-speed rocket sled capable of speeds greater than 600 miles per hour.

Stapp's experiments showed that when properly belted, subjects could tolerate impacts that would otherwise cause serious injury. He demonstrated scientifically that many serious automobile and aircraft accidents could be survived without serious injury if seat belts were worn to restrain the occupants. The findings of DeHaven and Stapp soon led automobile manufacturers to offer seat belts as optional safety equipment.

How do Seat Belts Work?

In a 30-mile per hour crash test, the car takes about two feet to come to a stop. This is a fairly abrupt stop. As mentioned in the discussion of the human collision, the occupants usually stop over a much shorter distance, perhaps one to two inches. This difference in stopping distance means that the occupants will stop much more abruptly than the car. To allow the person to come to a more gradual stop, all of the *car's* stopping distance has to be used. Holding the person in his seat with belts allows him to stop within about the same distance as the car. As a result, the forces on the body are greatly reduced.

The difference between the belted person's stopping distance and the unbelted person's stopping distance is often the difference between life and death. This is like the difference between one of DeHaven's fall victims landing on a sidewalk or in garden soil. The soft ground gives the person a few inches in which to come to a stop. Seat belts give the person in the car an additional couple of feet in which to stop.

The lap belt keeps a person inside the car, protecting him from the many dangers of being thrown out of the car. Even if used alone, the lap belt usually keeps the head from striking the windshield or windshield frame. It allows the body to bend forward so that the head hits only the steering wheel or dashboard. These parts of the car are designed to absorb energy and although their cushioning effect is somewhat limited, they cause much less damage than harder structures. The lap belt allows the hips to absorb much of the force of the collision and thus reduces the force that the head or chest must absorb in hitting the steering wheel or dashboard.

The shoulder belt prevents the head from hitting the steering wheel or dashboard. The shoulder belt provides a great deal of extra protection, particularly in preventing injuries to the head and face. These are very dangerous and disfiguring injuries. The shoulder belt prevents these injuries by restraining the upper part of the body, keeping the head from hitting the interior of the car.

Many people find the shoulder belt uncomfortable and inconvenient when they first start using their belts, particularly in older cars with separate shoulder belts. In order to prevent the injuries to the head and face, it is worth the trouble to wear the shoulder belt whenever possible. *A shoulder belt should never be worn without a lap belt.*

HOW CAR-SENSITIVE EMERGENCY LOCKING RETRACTORS OPERATE

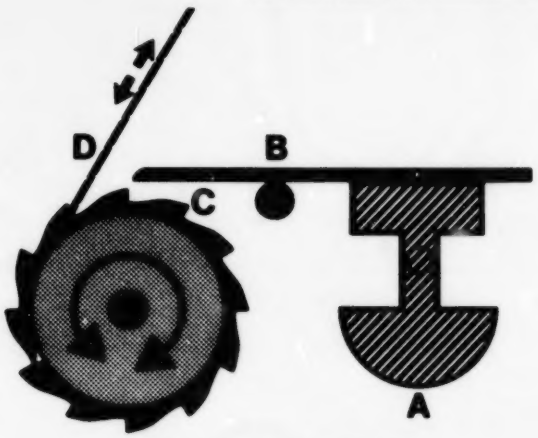


Figure 1 — NORMAL CONDITIONS

The majority of car-sensitive retractors use a pendulum (a) to sense an emergency condition and a bar (b) and ratchet (c) mechanism to lock the seat belt (d) in place.

Figure 1 — Under normal driving conditions the pendulum and bar in their normal rest positions. The reel which holds the belt is free to rotate. As the occupant moves forward, say to reach out to operate controls on the dashboard, the belt will move with the occupant.

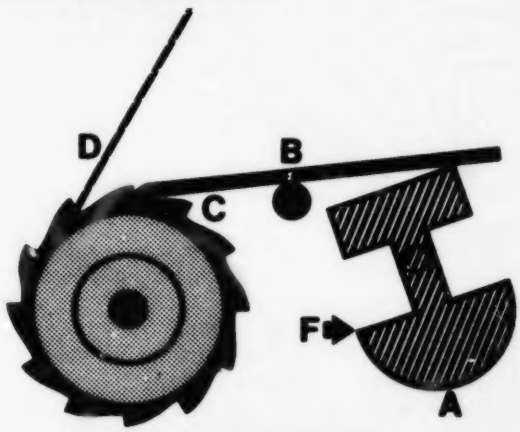


Figure 2 — EMERGENCY CONDITIONS

Figure 2 — Under emergency conditions, such as in a collision, the pendulum will move forward under the force of the impact (f) causing the bar to engage the ratchet. The reel and seat belt are now locked in place and the occupant is held firmly in his seat.

Together, the lap and shoulder belts work to keep a person in his seat and to distribute the force of the collision over the hips and shoulders — the parts of the body that can best withstand the force.

Emergency Locking Retractors

All cars manufactured after January 1, 1974 and sold in Canada are required by Canada Motor Vehicle Safety Standards to be fitted with special seat belts in both outer front seat positions. These are one-piece lap and shoulder belts which have emergency locking retractors.

A retractor is the device which winds up the slack in a loose or unused seat belt. Under normal driving conditions, this system allows belted occupants freedom to bend forward and sit comfortably in the car. A person who is wearing the seat belt can, for example, reach out and operate controls mounted on the dashboard. The shoulder part of the belt will pull out as the person moves forward, and will be pulled back by the retractor when the porson returns to the normal seating position. Only in an emergency, such as a panic stop or a collision, will the retractor automatically lock and hold the person in his seat. This is why these types of retractors are called "emergency locking".

There are two types of emergency locking retractors: belt-sensitive and car-sensitive. Both types automatically lock in a collision, but the way each does this is different.

A belt-sensitive retractor locks when it senses any quick movement of the shoulder belt. In a collision, a belted person would move forward very quickly and produce such a movement of the belt. There is a very simple test to check if your car has belt-sensitive retractors and if they are working properly. Hold the shoulder part of the seat belt and give it a very sharp tug. The belt should lock before it has pulled out more than a couple of inches.

If the belt does not lock in this test then it may mean that you have car-sensitive retractors. These retractors lock only when they notice any quick change in the motion of the car. Most seat belts in new cars use these retractors. The operation of this type of retractor can be checked with the following road test. It should be attempted only on a dry level area with no traffic nearby. Do not try this test on wet, muddy, or icy roads:

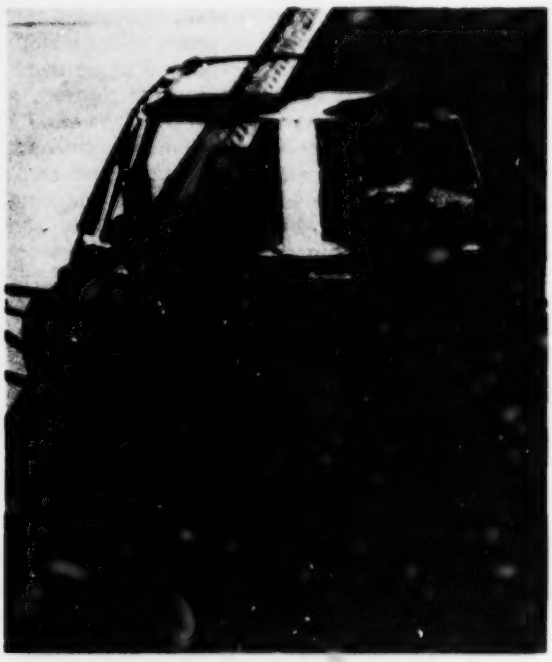
(1) Properly fasten the seat belt;
(2) Start engine and drive in a normal manner until your speed reaches about 5 m.p.h.;
(3) Make sure that it is safe to brake and, if so, brake sharply. You should feel the belt lock and hold you firmly in your seat.

Your owner's manual will usually identify which type of retractor is in your car and give instructions to check its operation.

Laboratory Evidence

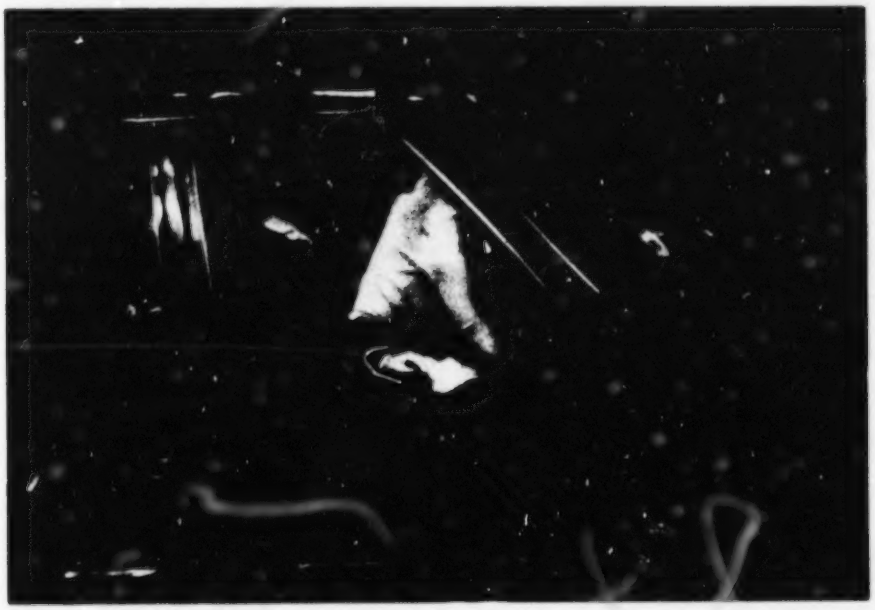
Since the early research showed that seat belts could reduce injuries in automobile accidents, further research has gone into the testing and development of seat belt systems. A large body of evidence for the value of seat belts comes from different types of studies, all of which agree that seat belts greatly reduce injury and death. These studies include laboratory testing, controlled test-track crashes, on-the-scene accident investigations and investigations of accident records.

To simulate a real-life crash in a laboratory setting, dummies have been built to approximate the human body. The dummies ride in a crash simulator sled, a structure similar to that of a car frame. The sled runs along a track and is controlled so that it can be accelerated and stopped suddenly. In this way, the dummies can be subjected to forces similar to those that people experience in automobile accidents. The simulated crashes are filmed in ultra-slow-motion to enable observation of what actually happens to the dummies in the crash. Instruments inside the dummies record the impact on various parts of the body.



This type of crash simulator sled uses an actual car body. The sled is controlled so that it can be accelerated and stopped suddenly to simulate the forces that occur in real collisions.

Test-track crashes are conducted using instrumented dummies and vehicles that are remotely controlled. Each car carrying belted or unbelted dummies is driven into another vehicle or a solid barrier. After each controlled crash, the instrument records and slow-motion film are examined to find out what happened to the car and to each of the dummy occupants. Sled tests with human volunteers have been used to verify the beneficial effects of seat belts.



This is a laboratory simulation of an 11 mph crash. The human volunteer is safely belted in his seat but the unbelted dummy has moved forward and struck his head on the steel windshield frame and glass.

It's hard to believe that a crash at 11 mph could have serious consequences like this.

Evidence From Real Accidents

Seat belts reduce injuries to dummies and to humans in laboratory settings, but this alone does not prove that they help people in real accidents. Real accidents are much more complex than controlled laboratory collisions. Nevertheless, actual accidents have been studied and the findings all point to the benefit of seat belts.

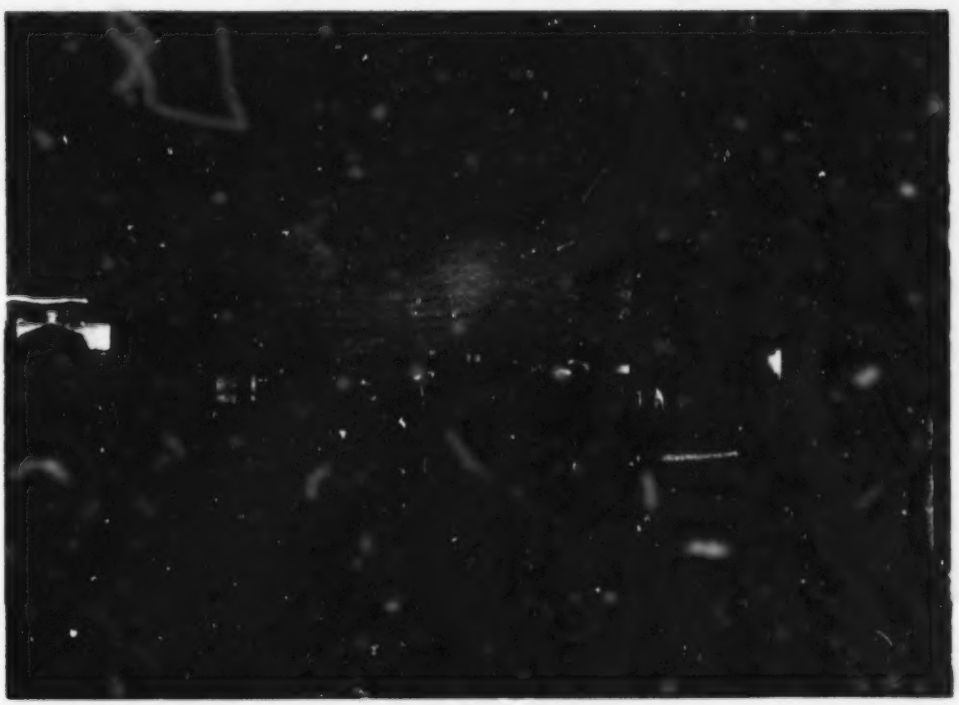
Some of these studies involved on-the-scene investigations of accidents by teams of engineers and doctors. The forces involved in each collision are estimated from the damage sustained by the outside of the car. Damage to the occupants and to the interior of the car are matched to determine the exact cause of injury. These accident investigation studies have all concluded that about half the deaths and serious injuries would have been avoided if lap and shoulder belts had been worn.

One study looked at all the fatal accidents in Metropolitan Toronto in 1970. During that year, 35 drivers and 22 passengers were killed. None of them were wearing seat belts. This investigation concluded that more than half the deaths of both passengers and drivers could have been prevented if seat belts had been worn.

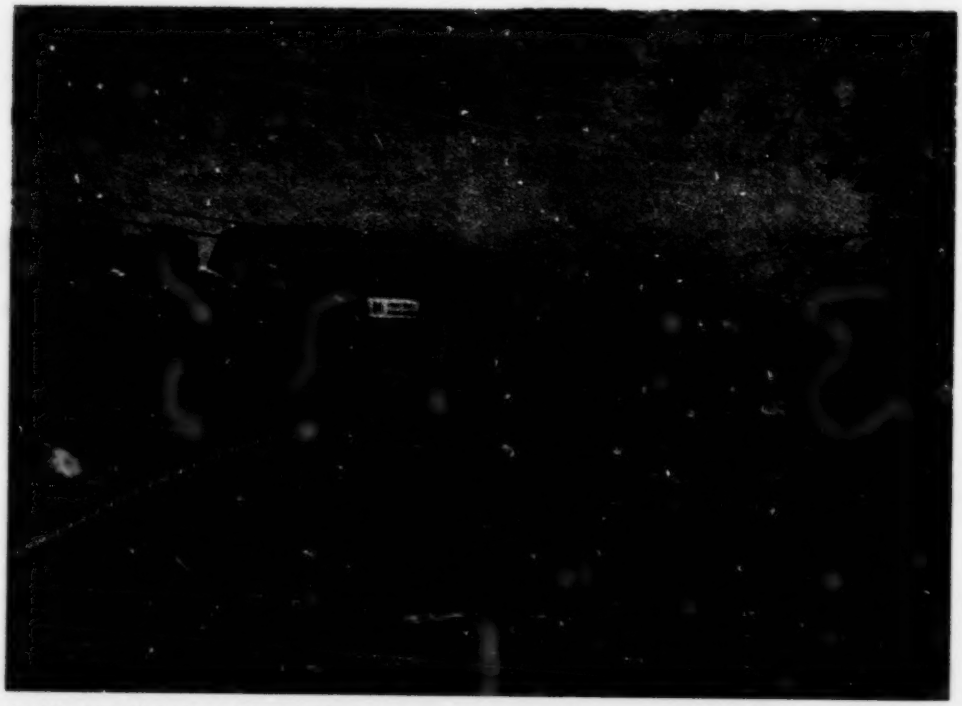
When large numbers of accident records were surveyed, it was again found that seat belts reduced injury and death by about half. One major study of 28,000 accident records was conducted in the mid-1960's in Sweden. This study included all kinds of accidents, serious and minor, but only one make of car was involved. All vehicles were equipped with three-point lap and shoulder belts. The study found that belted people received about half as many injuries as unbelted people in collisions at all speeds. As expected, the greatest reductions were in head, face and chest injuries. No one wearing a seat belt was killed in any collision at speeds up to 60 miles per hour. Unbelted people were killed in collisions at speeds less than 20 miles per hour.

The Swedish study is the most widely known of its type. However, similar studies have been conducted in North America and all have found that belts save lives and reduce injuries in all types of real collisions. Much of the benefit from belts in real accidents is due to the dramatic effect of lap and shoulder belts in reducing the most common injuries — those to the head and chest.

A study of 1,355 accidents in recent model North American cars showed that belted drivers are less likely to be involved in accidents in which a second impact or collision takes place. Usually this second impact involves another motor vehicle or a pedestrian. Seat belts help the driver to remain in his seat and in control of the car during and after a collision or violent manoeuvre. The use of seat belts can thus prevent the additional injuries and vehicle damage that would result from a second collision.



Real accidents are more complex than controlled laboratory collisions.



Accidents are investigated by specialized teams to determine the causes of injuries or death.

Mandato Seat Belt Use

Since the early 1970's, a number of countries have introduced mandatory seat belt use. Dramatic increases in seat belt use have resulted. In every case, this increase has lead to significant reductions in deaths and injuries in motor vehicle accidents.

In Australia, drivers and front-seat passengers have been required to wear seat belts since 1970. Belt wearing rates (in cars that had belts installed) in all Australian states increased from approximately 20% before the law was passed to approximately 70% three years later. Since 1973, there has been a steady increase in belt use to 90% in 1976. Victoria and New South Wales have achieved and maintained a better than 20% drop in deaths.

Similarly, in New Zealand, increased belt use has been responsible for reducing fatalities to drivers and front-seat passengers. Fatalities to other passengers, who were not required to wear seat belts, have increased. Injuries, especially head injuries, shock and injuries caused by striking the windshield decreased when seat belts were worn.

Finland, Sweden, Norway, Belgium and the province of Ontario have all recently experienced increased usage rates and corresponding reductions in injuries and deaths from motor vehicle accidents. In Finland, it was found that 88% of drivers observed were wearing belts. Sweden measured 84% belt use for front-seat passengers and the number of seriously injured occupants in car accidents has been reduced by 46%. During the first four months of mandatory seat belt use, Belgium has also reported decreases in deaths and injuries. Deaths were down 53.8%, severe injuries were down 28% and minor injuries 20.9%. Preliminary findings in Ontario indicate that belt use has increased from 17% before the law was passed to 66% six months later. For the first six months of 1976, when the use of seat belts was mandatory in Ontario, the number of deaths was 21% below the number predicted on the basis of ten years' fatality figures.

SEAT BELTS AND CHILDREN

The body of a child is different from the adult in a number of ways. The skull is softer and much larger in proportion to the rest of the body. The rib cage is thinner and more elastic. The young child's prominent abdomen provides only limited protection to the large internal organs. Unlike the adult, the child has a pelvis with broad gentle contours. The prominent crests which can provide an anchor point and contact area for the lap belt do not develop until approximately age 10. These factors make it important that special consideration be given to providing crash protection for the infant and child.

The small child's heavy head and fragile skull make him very likely to suffer serious head injuries even in low-speed accidents. Also, children are often allowed to ride in positions in the car which greatly increase their chances of injury. If there is a crash or a sudden stop a youngster standing on the seat becomes a missile striking some part of the vehicle's interior; a child leaning out a window will be wholly or partially ejected; and a baby sitting on an adult's lap can be crushed against the dashboard or seat back.

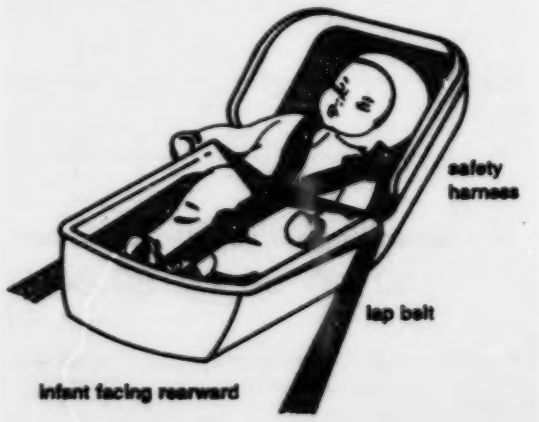
13.8 percent of car passengers killed or injured in Canada in 1974 were under the age of fifteen. In order to provide adequate protection for this age group, children in three size categories require specific consideration.

I Infants — less than 20 lbs.

Infants weighing less than 20 lbs. need the protection provided by rear-facing seats which are anchored by the adult lap belt.

In this seat the infant faces the rear of the car and the deceleration forces are spread over a very large proportion of the infant's body.

As a general rule, children should always ride in the rear seat of a car. However, the rear-facing infant seat *does* provide protection which enables it to be used in the front seat.



II Children — between 20 and 40 lbs.

Children weighing between 20 and 40 lbs. should use *properly installed* child restraints which have been tested and proven effective in providing crash protection. There are two basic designs for children of this size.

A. Seats With Harnesses

The five-point safety harness, an integral part of this design, spreads the forces of the impact over the strongest parts of the child's body. The crotch strap, or lowest point of the harness, keeps the webbing down on the pelvic bones, preventing it from riding up over the tummy and putting pressure on the abdominal organs.

This type of seat is anchored to the car in two places: (1) around or through the centre by the adult lap belt; and (2) from the top back by a top anchor strap. It is essential that both of these two anchor points be utilized to prevent both the upper and lower portions of the seat from flying forward carrying the child with them. Installation of these seats and anchor points should be strictly in accordance with the manufacturers' instructions. In some cars, station wagons, and pick-up trucks, installation of the top anchor strap may be difficult or impossible. When this is the case, an approved seat that does not require a top anchor strap might be available.

B. Seats With Protective Shields

This design allows the forces of a collision to be distributed over a very large area of the body, thus greatly reducing the chance of injury. A restraint of this type may have the advantage of not requiring a top anchor strap — it is anchored solely by the lap belt. This makes it convenient to use and adaptable to a variety of vehicles. This type of seat gives maximum protection when used in the centre of the seat.

Older Children

Children over the age of 5, or weighing over 40 lbs. can wear a regular lap belt. However, until age 10 a child's pelvis has not yet developed the prominent boney structure which readily holds the lap belt in place. Care must therefore be taken to prevent the lap belt from moving up off the pelvic bones and applying pressure to the abdomen. When this happens under impact it is called "submarining" and can cause serious bruising of internal organs.

Be sure that the lap belt is snug and low over the hips — it should never be worn over the tummy.

Pillows and cushions between child and belt, or between child and seat can also cause "submarining" and should be avoided — with one possible exception. A firm support can be used under a child to raise him or her a few inches if the following precautions are observed:

(1) the support must be of very firm non-flammable material — the lighter it is, the easier it is to anchor;

(2) the support must be anchored securely to the seat to prevent it from flying out from under the child during a crash.

A properly fitted shoulder belt may be worn, along with the lap belt, by older children.

Children, like adults, often resist using a restraint system when they are first introduced to it. Youngsters, however, very quickly come to develop a feeling of comfort and security in a child restraint. To achieve this, the restraint must be used *everytime* the child rides in the car. An explanation of what the restraint does and how it works often helps. After a week or so of resistance, most children happily accept their restricted mobility and enjoy having their own special place to sit and ride safely.

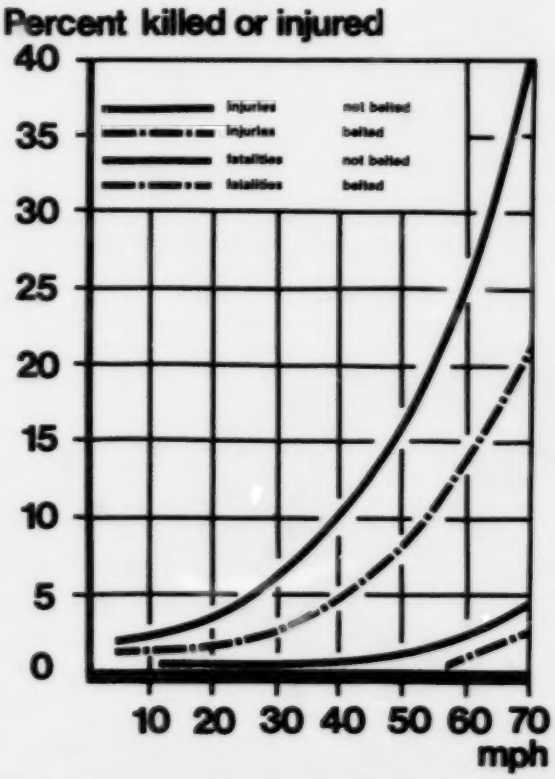
As in many other situations, children need the care and protection of a responsible adult when riding in a car. A child seated in the appropriate restraint device is safe and well cared for; an unrestrained child has been neglected and is in danger.

Whether using child restraints or regular lap belts, and especially if unrestrained, children should always ride in the rear seat.

IN ALMOST EVERY CASE IT'S BETTER TO WEAR SEAT BELTS

In Canada in 1974, 2,529 drivers died in accidents. The death rate for unbelted drivers was about 2.38 per 1,000 accident-involved drivers. The death rate for belted drivers was only .85 per 1,000. These figures are consisent with studies done elsewhere that show that belts reduce the chances of death by more than half. They also show that belts cannot save everybody in all collisions. Of the few belted drivers killed, some were undoubtedly wearing only lap belts and might have been saved if they had worn both lap and shoulder belts.

Seat belts are more effective in some kinds of collisions than others. They provide more protection in head-on and front-angled accidents and rollovers than in side or rear-end collisions. However, it has been shown that vehicle occupants are better off in a side collision if they are wearing their seat belts. They also tend to be more effective at speeds of less than 60 miles per hour. Seat belts cannot always prevent fatal injuries in extremely high-speed accidents or those which involve direct contact with an object, such as a tree, entering the car passenger compartment. Nevertheless, safety experts are unanimous that seat belts are of some benefit in nearly all accidents.



A Swedish study showed that belted people received about half as many injuries as unbelted people in collisions at all speeds. (N. I. Bohlin, 1967)

The Dangers of Being "Thrown Clear"

The human collision can also take place outside the car — if the person goes out through the windshield, side window or door. Some people claim that it is safer to be "thrown clear" during a collision. Careful research has shown that the risk of death or serious injury is many times greater if the person is thrown out of the car.

About one-quarter of all passenger and driver deaths result from being thrown out. One study estimated that about 80 percent of these deaths could have been prevented if the person had stayed in the car.

Those who believe that it is safer to be thrown out of the car should consider why motorcycle accidents are so dangerous. Motorcyclists suffer an extremely high rate of injury and death in their accidents because they are "thrown clear" nearly every time.

The world outside the car is very dangerous for a fast-moving, unprotected human body.

The Importance of Remaining Conscious

People often say they don't wear their belts because they are afraid of being trapped in a burning car or a car submerged in water. Actually, the occurrence of fire or submersion is rare, especially when compared to the danger of the human collision which occurs in almost every accident. Rather than trapping the occupants, seat belts help them remain conscious and thus able to get out of the car quickly. You cannot escape from a burning or sinking car if you are lying on the floor with a fractured skull.

A study of belted drivers who were killed in motor vehicle accidents in Ontario between 1972 and 1975 found that very few died in a car that burned or was submerged in water. During this four year period, 175 belted drivers died in traffic accidents. Of these, only 3 died in a burning or submerged car. In 1973 and 1975, *no* belted drivers died as a result of fire or water! Most of the 175 died in high speed head-on and side collisions. It is likely that most of these accidents were just so severe that they were unsurvivable. However, some of the drivers might have been saved if they had been using their shoulder belt as well as their lap belt.

The Importance of Being Properly Belted

Belted occupants may occasionally receive injuries from the belts themselves. These injuries are usually minor. Bruises, slight rib fractures, and muscle strain and soreness are much more acceptable than the injuries which occur when vehicle occupants are not wearing seat belts.

The occasional intra-abdominal injury from lap belts usually results from incorrect adjustment; wearing the lap belt too loose, or too high on the abdomen. The belt should be worn snug and as low as possible on the hips. Newer lap belts are auto-

This car was involved in a rollover accident. The driver was fatally injured as a result of being thrown out the back window and the car rolling over her.

matically adjusting and it is less likely that improper adjustment and related injuries will occur with these belts.

If the lap belt does not fit due to seat position or a person's size, an extension has been made available by the automobile manufacturers and can be purchased from a dealer.

Shoulder belts are best suited for people 4′ 11″ in height or taller. The shoulder belt fits properly when the webbing passes over the near shoulder, across the collarbone, and diagonally across the chest towards the far hip. It may have an inch or two slack for comfort. The shoulder belt should never be worn under the arm.

People shorter than 4′ 11″ or very tall people may find it difficult to get a proper fit with some shoulder belts, but this is primarily a problem of comfort rather than one of safety. Accident investigations have found that the shoulder belt does not cause serious neck injuries, as some people fear. The shoulder belt may cause bruises and minor fractures, but these are far less damaging than the head and face injuries received from not wearing it.

Unlike other questions involving seat belts, there has been some controversy among experts as to whether pregnant women should wear seat belts. The medical profession now supports the use of lap and shoulder belts by pregnant women. The most frequent cause of death in car accidents for an unborn child is the death of the mother. The best way to protect the unborn child is to ensure the safety of the mother. Seat belts worn properly (lap belt low under the abdomen) provide considerable protection for pregnant women.

Are Belts Necessary At All Times?

Many people wear seat belts only on long trips or when weather conditions seem particularly dangerous. Serious accidents, however, occur at all speeds, on all kinds of trips and under all kinds of conditions.

The accident rate is low on expressways where much high-speed, long-distance travel takes place. Short trips on urban and rural roads are potentially more dangerous even though the traffic speeds are lower. Most people drive locally a great deal more than they drive long distances. Thus, the chances of being in an accident close to home are greater.

Many accidents occur when visibility is poor or roads are slippery, but most serious accidents, those that cause injury or death, occur under clear and dry conditions. The majority of fatal accidents take place at moderate speeds. More fatal accidents occur in the late summer and early fall months when the weather is usually favorable, than in winter months.

Some of the earlier belt designs have been inconvenient for the user. However, the evidence clearly indicates that seat belts are worth the trouble it takes to wear them. Design requirements for 1974 and later cars have made belts more comfortable and easier to wear.

The only way to gain full benefit from seat belts is to make a habit of using them on every trip.

PERSONAL RISK

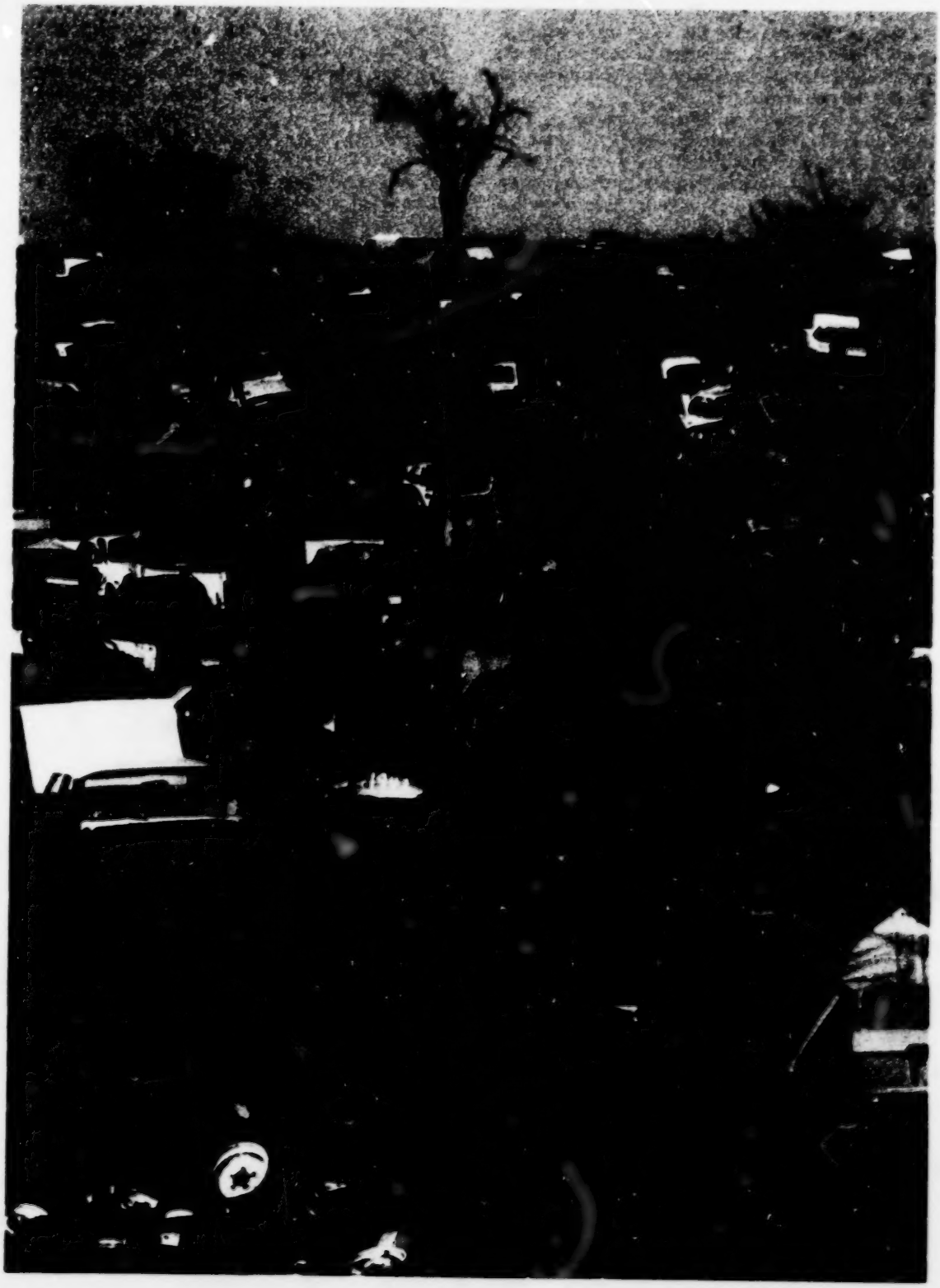
Every person who uses the roads risks injury or death. It is certainly not pleasant to contemplate the possibility of being killed each time you drive your car, but the risk is real.

Of all the people now living in Canada in 1975, 10.1 percent (2,260,000) will be killed or injured in a motor vehicle accident within the next ten years. Over the next forty years, 34 percent of the current population will be killed or injured. That's more than 7,684,000 people.

Over a lifetime, a person has more than a fifty/fifty chance of being injured in a car accident. There are many things that will reduce your own risk. You can drive very carefully. You can avoid driving after drinking. You can keep your car in peak condition. You could even drive less. None of these steps, however, will guarantee that you won't have an accident.

Good drivers have accidents too, sometimes because they are hit by drunk drivers or other poor drivers, sometimes because they make an error. Nobody is immune to accidents.

No one can control all of the factors involved in a traffic collision. But there is a simple and effective way of cutting your risk by more than half — *wear your seat belts.*



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